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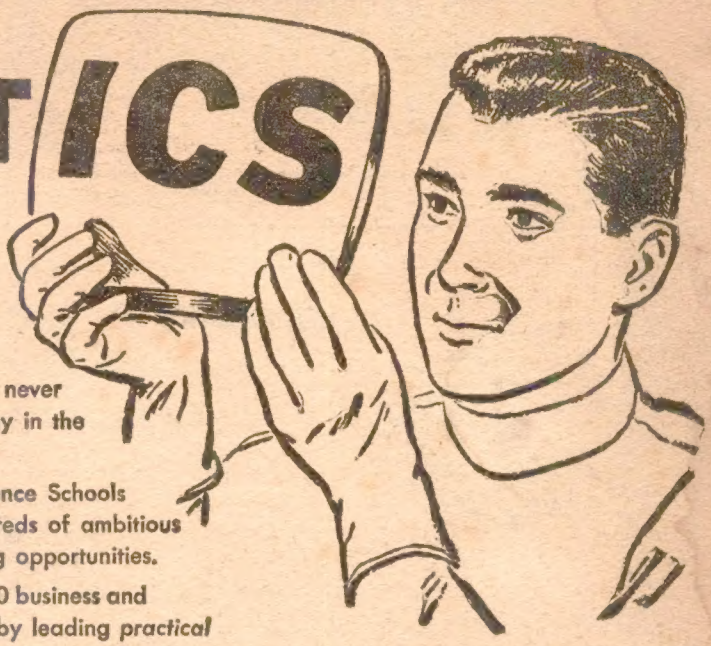

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THRILLING WONDER STORIES

VOL. XXXVI, No. 2 A THRILLING PUBLICATION June, 1950

Featured Complete Novelet

SUNDAY IS THREE THOUSAND MILES AWAY

By RAYMOND F. JONES

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1850—ONE HUNDRED YEARS OF ICE PROGRESS—1950

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SO now it is the H-bomb—purported to be some hundred times more lethal than the now-primitive A-bomb which razed Hiroshima on August 6, 1945. Since our scientists seem to know how to build it it is going to be built. And with its building here and perhaps in other countries is going to come an enlargement of already growing human insecurity.

A famous Midwest publisher may now build deeper and more heavily-shielded shelters under his neo-Gothic Chicago tower. Some of those who have means may abandon their big-city residences in favor of more isolated homes. But the bulk of us are going to go on living—and dying—exactly as before.

Are Illusions Necessary?

Actually and under the very best of circumstances security is one of the most easily punctured human illusions. Thanks to the luck of history and geographical isolation we in America have not suffered any great national threat of invasion or widespread calamity since the repulse of General Pakenham's redcoats by Andy Jackson's swamp fighters, convicts and Creole volunteers at New Orleans in January, 1815.

Yet in that time we have known much of disaster. We have fought Indians, Mexicans, Spaniards, Germans, Japanese and the most savage Civil War in human history. San Francisco has been razed by quake and fire, Galveston by tidal wave, Johnstown by flood and Texas City by nitrate explosion. And everyone alive at the time of Jackson's victory has long since died, from disease, bullets, vehicular accidents or from slipping on cakes of soap in the bath tub. Yes, our security has been a carefully nurtured and utterly false illusion.

The question remaining before the house is whether or not an illusion of security is necessary for our species to develop and create along the lines which make for that generally tolerable set of conditions known as civilization. This we are inclined to believe is needed.

Offhand we find it difficult to think of any great and enduring works of art or engineering which have been created on the slopes of Vesuvius—although men and women have lived and worked and loved and thought and toiled and died there quite peaceably since at least Cro-Magnon times.

The murals and other art of Pompeii and Herculaneum were created during an era of illusory security which was terminated abruptly by the eruption of 79 A. D. And with all apologies to the Bergman-Rossellini combine we have never heard of any important cultural achievements on Stromboli—or Etna or Krakataua.

The Renaissance Greats

It is true that the incredible flowering of the Italian Renaissance occurred during an era of gangster politics and interminable warfare and conspiracy among a score or more of city-states. But a look at the records will show that the artist or engineer as a rule was granted a sort of immunity by the very high credit in which his profession was held by his rulers. While several of the Renaissance greats spent some time in prison for political and personal

offenses, we can't think of one of them who was put to the rack or the sword.

Actually most fears are as illusory as the dream of security. We once were acquainted with an elderly and impecunious gentleman who had sacrificed a great fortune a decade earlier because he absolutely refused to conduct any business transactions on Friday. Furthermore, impecunious or otherwise, he still held the day to be unlucky. Seafaring ancestors wished this one on him.

We have known a number of people whose panic fear of thunderstorms was downright ridiculous, including one woman who resolutely insisted on putting her feet on a silk cushion when the lightning began to flash, no matter how distantly.

We have known or heard of folk with similar fear of mice, cats, spiders and snakes. And there are records of plenty of high Nazi officials who promptly committed suicide rather than face "loss of favor" with someone higher-up in the Hitler hierarchy.

Fear of the Unknown

Of course, living with the A-bomb is taking some doing for a lot of folk; and adjustment to the fact of the H-bomb is going to take a bit more. But considering the absurd nature of much human fear we have a hunch the bulk of humanity will make the necessary adjustment without too much difficulty.

The origins of most fears—excepting those of immediate injury or destruction—are utterly childish. There are no "race" or "species" fears inherited by any of us. The bulk of them are simply handed down to very young children by a once-frightened parent—or by a parent who has had the same fear passed to him by his parents.

Rooting out such "instinctive" terrors is in many cases a job for the psychiatrist. But most of us can do the job ourselves if we are willing to go back to its origin in our lives, to look at the object of fear with curiosity rather than terror, finally to decide what actually it offers in danger to ourselves or those we love.

Once we have looked at the terrible thing without panic we are usually surprised at the ease with which we are able to adjust ourselves to its presence. Above all we must

[*Turn page*]

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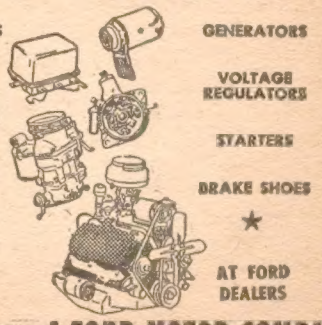

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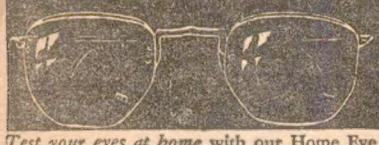

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not fear the unknown simply because it *is* unknown.

New Horizons

We must remember that we are living in an era of snowballing scientific expansion—an era in which new horizons are constantly going to be opened and expanded. Some of the views exposed by these new horizons are not going to be pretty ones. But in the ultimate it depends mainly upon ourselves how harmful they shall be allowed to become.

Those who died of the so-called "poisoned smog" in Donora, Pennsylvania, not long ago, are surely as dead as those who perished under the blast of the A-bomb at Hiroshima. And they are just as much victims of scientific "progress" turned lethal through human error.

Those who let lust for profits permit them to infect the air of the community are at least as guilty as those appeasement rulers who, in the name of present security, permitted the warlords to break loose. It is up to us with our franchise to see that in this country at any rate such men are not voted into power. Also to look for men, moments and situations that will enable us to help the world to work as a peaceable unit.

OUR NEXT ISSUE

HENRY KUTTNER moves up into the top novelet spot in our August edition —with a riotously ingenious tale of the tribulations of Peter Owen, entitled AS YOU WERE.

Peter was the nephew of the most resourceful, gifted and ingenious scoundrels even the cinema ever knew. At the same time he had the misfortune to be enamored of the Hollywood star Claire Bishop. Uncle Edmund was the sort of person who could happily and competently carry on a feud with Noel Coward, the Las Ondas Chief of Police and the local garbage collector, at the same time conspiring in his own favor with virtually every movie studio to ensure profitable production of his superepic, *Lady Pantegruel.*

Also in Uncle Edmund's trap was a brilliantly childish scientist, Dr. Krafft, who was helpless in the rascal's adroitly villainous hands as long as his host kept his stone

frog. Maxl, locked in his library safe. For Dr. Krafft was helpless without the inspiration of Maxl.

Such is the situation—with Peter's entire material and emotional welfare depending on forcing a mulish Uncle Edmund to let Claire Bishop have the lead in *Lady Pantegruel,* when he finds the time-clock in his room.

It shouldn't have been there, of course. Due to a series of unforeseen events the clock—really a pendulum for a boatload of alien time-space tourists which Peter names Wynken, Blinken and Nod—got utterly out of hand and wound up in Peter's bedroom.

When he discovered that with it he could set back time for a certain number of minutes and do things over again, Peter set out to get the tangled local state of affairs straightened out in his favor. But each time some new factor managed to put him back behind the shiny black of the eight-ball.

Before this novelet attains its unexpected conclusion the reader is apt to be reduced to a helpless condition composed of equal parts of suspense, frustration and laughter. We liked this one even better than Kuttner's memorable THE VOICE OF THE LOBSTER, which won acclaim in our February issue.

Jack Vance, whose Magnus Ridolph stories have been appearing frequently in our companion magazine, STARTLING STORIES, for lo, this many a moon, has forsaken that goateed and urbane adventurer of the star-trails in a brilliant, possibly classic, novelet entitled NEW BODIES FOR OLD.

Roland Mario is one of five too-relaxed companions sitting idly on the Oxonian Terrace of a near-future San Francisco, battling the blight of boredom. He hears one of the party suggest a mysterious project known as the *Chateau d'If,* a vast pleasure tower being reared near the city, of which little is known, as a possible means of relief from ennui.

The *Chateau d'If* costs much money and while none of the group is rich—they are all young men of parts if not means—they agree to put up two thousand dollars apiece for the winner, dice to decide his identity. It is not Mario but Zaer who wins the cubic cast.

He vanishes into the great tower and

(Continued on page 141)

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but can't get started

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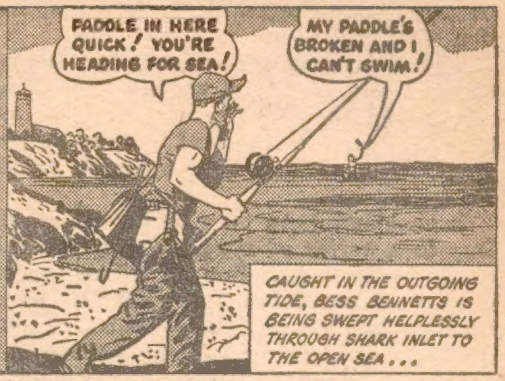

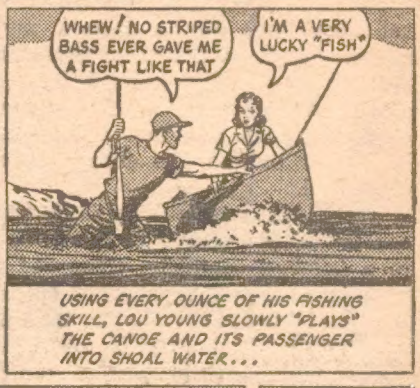

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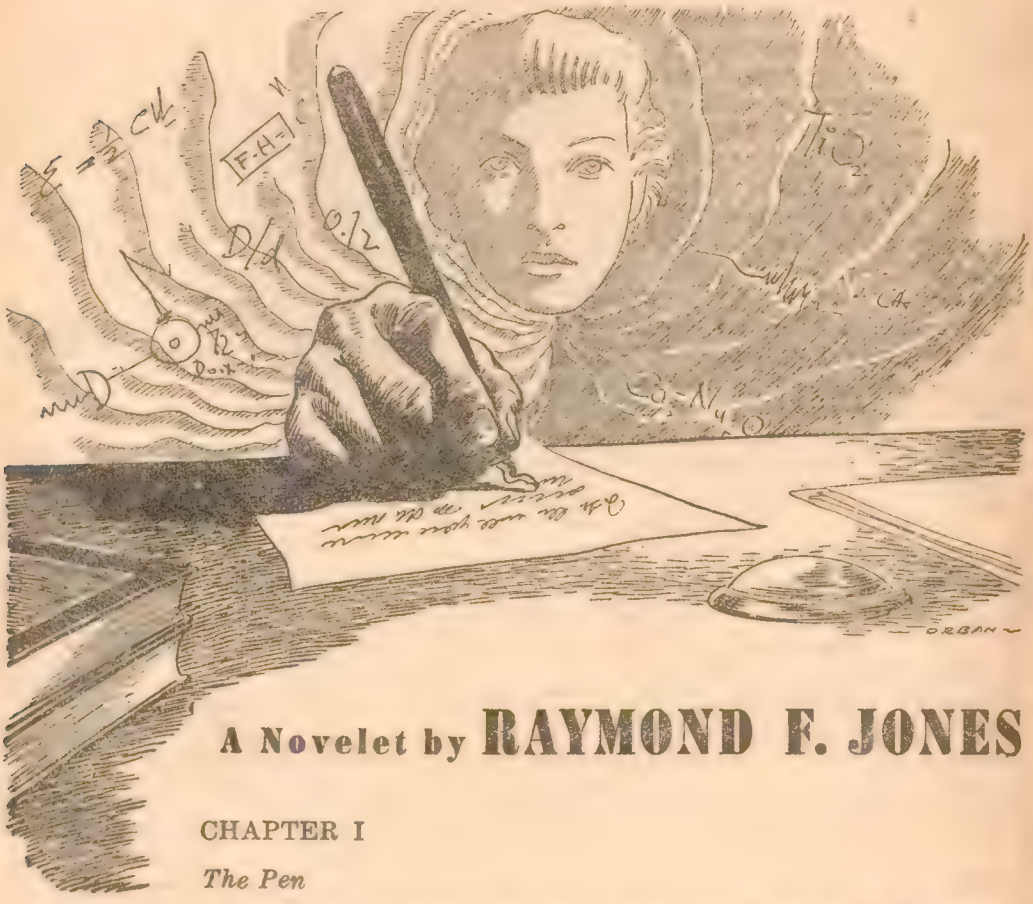


A Novelet by **RAYMOND F. JONES**

CHAPTER I

The Pen

GEORGE BROOKS had once estimated that it cost Atlantic Engineering exactly one dollar and thirty-two cents every time Rena Corsen came in the door of Microwave Section.

He based his computation on the average rate of pay per minute received by the engineers and draftsmen multiplied by the fraction of a minute that it took Rena to walk from the front of the office to the rear where George's desk was located. During the time of her

The pen that wrote by itself was a lot more than a gadget—for with its help Rena Corsen and George Brooks bridged the chasm of eternity!

entrance no engineering was done.

And for many minutes after her departure George seldom did much engineering. His thoughts were more on the high price of real estate, what part of their new house he could reasonably section off for his home lab, how he could convince her that the nursery should not be on the second floor.

There *would* be a nursery, of course. Well used, too. George considered himself the makings of quite a family man and Rena loved children.

He watched her coming toward his desk now. The heads of his fellow engineers slowly turned, then self-consciously jerked back to their work. It was like a wave in a wheat field bending before the wind, George thought.

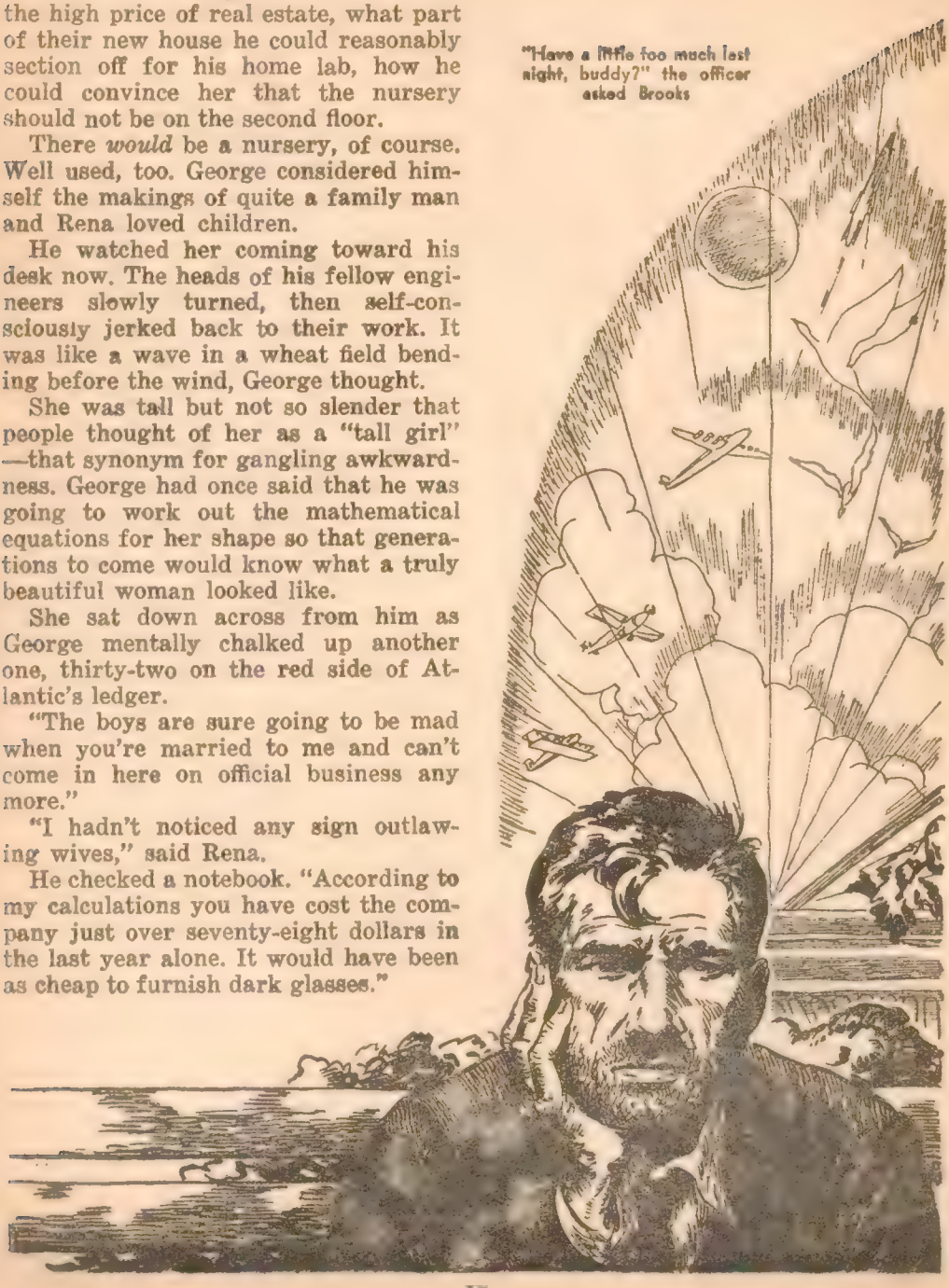
She was tall but not so slender that people thought of her as a "tall girl" —that synonym for gangling awkwardness. George had once said that he was going to work out the mathematical equations for her shape so that generations to come would know what a truly beautiful woman looked like.

She sat down across from him as George mentally chalked up another one, thirty-two on the red side of Atlantic's ledger.

"The boys are sure going to be mad when you're married to me and can't come in here on official business any more."

"I hadn't noticed any sign outlawing wives," said Rena.

He checked a notebook. "According to my calculations you have cost the company just over seventy-eight dollars in the last year alone. It would have been as cheap to furnish dark glasses."



"Have a little too much last night, buddy?" the officer asked Brooks

"What I like about you most, darling, is that you never talk sense." She laid a copy of *Electron Age* on the desk and opened it to a technical article bearing her by-line.

"Mendon wants me to do a follow-up on this satellite-spotting radar piece of yours. There have been a lot of objections from your public which doesn't like your math. I've got a list of the criticisms here. Can you give a rebuttal on them for the next issue?"

George shook his head slowly. "Any more than you already have is strictly on the *verboten* list. The only reason you were able to clear what you did is lost in the circularity of military thought —which is even now administering a kick, no doubt, to some rear echelon lieutenant for passing the thing in the first place."

"It gets tougher all the time to make a living in this business. I think I'll get a job with some recipe journal. Have you got anything else that I can write about?"

He opened his lab book. "Carl and I have been doing some study on integral calculators. He's trying to cook up a new gimmick for a piece of equipment of his. We've got a tube using what he calls a 'time sense.' You can't say anything about the tube but maybe you can work up a space filler out of this math. There are a couple of new notions there."

RENA looked at the scrawled pages with a polite groan. "Now I know I'm going to join a recipe journal. Who could make sense out of that?"

"You said Mendon wanted more math in his rag. There it is."

"I'll try but I don't think he will raise my salary for it." She wrinkled her brow in concentration over George's barely legible abstractions. After a few minutes she opened her own notebook and began copying.

George tried to return his attention to an urgent item concerning the production of one of his designs. It appeared that in a momentary lapse he had

specified a closed sphere to be bolted to a flat plate with nothing said about getting the bolt or nut inside the sphere.

But that could wait—

He watched Rena's hands, fascinated by the grace of her long fingers. It would mystify him until the last hour of his life how she ever got into technical journal writing. As a model she could have made at least ten times as much but she had been more than mildly insulted when he suggested it.

Electronics reporting was her specialty, and she was the best in the field. Up to the time of her appearance at Atlantic, George Brooks had never been known to give any of his stuff to the female members of the profession. Hatchet-faced, flat-chested spinsters he'd been known to call them, with Earth's nearest approach to pure vacuum located right between their ears.

But during the year 1, A.R.—after Rena, that is—his fellow engineers accused him of inventing just to have something for her to write about.

Maybe it was partly true, he thought. How could a guy be so lucky?

She looked up and smiled as if self-conscious under his stare. "You must have *some* work to do."

"Right—but why should I do it at a time like this?"

She started to close her book. "I can just as well borrow your book and bring it back in the morning. I'll go over this at home."

"Uh-uh. Wartime regulations again on that stuff. No lab books out of the plant any more. So settle down and let's enjoy ourselves."

She made a face and resumed copying the math. Fascinated, he watched the speed with which the symbols seemed literally to flow onto the pages of her book. Then he suddenly leaned forward. His abrupt movement startled her. "That pen—it *wiggles!*" He pointed to the pen in her hand.

She hesitated as if flustered by his abruptness. She raised the pen and looked at the point. "Oh, that—it's another of those seventeen-carbons-and-no-original gadgets, I think. Supposed to be good even in space-ships—if one should last that long."

"What kind of a swivel joint have they got behind that point? Let me see it."

"It's supposed to make writing faster."

He touched the point to paper and wrote, *My name is George Brooks. I love Rena.*

"Well, I'll be jiggered." It had taken about half the time of a short breath to write that many words. "The darn thing seems to almost go by itself."

"Yes—but how about me getting finished here? I've got to get a permanent this afternoon yet." She reached for the pen.

"I'm going to get one of those dinguses. Where did you buy it?"

"Hank's Drug in town. A dollar ninety-eight."

He resumed his unbelieving stare and Rena resumed writing and the symbols flowed again from the point—that incredible point that he'd have sworn wiggled all by itself.

He was still in that indolent position when Sykes, the section chief, came up. "Look, Rena," said Sykes. "Can't you either marry this guy right away or do your homework somewhere else?

"Look what you've got him doing—designing spheres to be bolted down and no bolts. A subconscious representation of his own head, no doubt. How about it, George? Drafting wants the change order on this today."

"Maybe you could put him in a little cell all by himself while I finish up here at his desk," suggested Rena.

"Good idea," said Sykes. "My own personal cell. Come on, George."

"Hey, now wait a minute—"

In less than that length of time he was installed up front in the glass-enclosed cubicle that was Sykes' own personal office—and the rest of the department was enjoying its own faint measure of revenge.

WHEN Rena left she walked past George with only a slight sidelong look in his direction. He got up

from the desk—and found that Sykes had locked the door.

The completion of the change order was then only a matter of minutes. He gained his freedom by waving the paper as Sykes went by.

Sykes grinned. "She's a nice girl, George."

He returned to his desk and sat down morosely. He appreciated a boss like Sykes, who was an old married man himself but not too old to understand how it was with a guy's wedding only a week away—especially to a girl like Rena.

George opened his lab book to resume his studies on the integrator math. He picked up a pencil and scanned the last line of equations, wondering what kind of transformation could be applied—

He started writing again—and stopped.

Rena had left her pen on his desk.

He forgot about the equations. He hadn't wanted to work on them very badly anyway. He touched the tip of the pen with his finger and moved it around. The thing really did wiggle as if it were mounted on a ball-and-socket joint. But how could anybody ever write with a dingus like that? If he hadn't experienced the incredible speed possible with it he would have sworn it wouldn't write at all.

He put the point to paper again and wrote.

—inconsiderate brutality. A savage age does not produce wholly savages. Because he is of such key importance I think the experiment should involve the utmost consideration for his perhaps primitive desires and reactions. Even a closed cycle individual cannot be ignored after results are achieved.

* * * * *

There were seven of them in the room besides Professor Harkase, four men and three women, including Rena Corsen. Rena was seated nearest the screen besides which Dr. Harkase was standing.

"In Experimental History," said Dr. Harkase, "we never ignore the personality of the individual subject. How could we when the success of the entire experiment depends upon it?"

"The reaction of George Brooks is not going to be a happy one when he learns that he is nothing but a guinea pig to see if we can penetrate Cell Four with a closed-cycle individual. I don't see why I couldn't have gone alone. I don't see the necessity of two, especially when we had to go back so far to find another closed-cycle individual besides myself."

"It is simply because you will be the Historian in the case and will have to withdraw as a subject. But it will undoubtedly be desirable to leave a subject in the closed cell permanently. Considering that the history of the Brooks subject has a strong potential affiliation on the other side of Cell Four it seems to me that we are giving him quite an opportunity."

Leave you there alone, George? He doesn't know what he's talking about. How can I ever tell them I love you—you savage?

"The important thing to discuss in this class session," continued Dr. Harkase, "is what the next move should be. You have gone far beyond the original lines of the experiment in allowing George Brooks to believe that he is to marry you. No doubt you had your reasons for so altering the plan but what do you propose next?"

"It seemed to be the only possible way to gain sufficient confidence to persuade him to accompany me voluntarily to Cell Four. I'm sure that it will be a small matter now to explain what we want of him."

"A peculiar procedure," said Dr. Harkase, unconvinced. "Perhaps you can convince us of the plausibility of your reasons for leaving your personal pen behind on his desk."

"*My pen!*" Rena's voice was a shrill hysterical cry.

"You mean you didn't intentionally leave it?"

"No, a savage—"

"Yes, a savage would have no under-

standing of the privacy of a thalamo-activated instrument and would proceed to use it—even as you see George Brooks doing now."

He gestured toward the screen, where the image of George Brooks was going through a minor fury of examination of the pen that would not write what he intended it to write—but was writing something entirely foreign and incomprehensible, something that was almost like Rena's thoughts.

"My pen!" Rena breathed again. She saw George put it to paper and write again.

I love you, George. Whatever happens, don't ever believe another thing about me. I love you.

Dr. Harkase touched a knob. "Shall we move the image up a bit and see what he is writing?"

"No!" Rena cried out. "Privacy! It's bad enough for him to— You have no right to invade privacy."

BY NOW the other six members of the graduate class in Experimental History were laughing heartily at Rena's discomfiture. But it was far from humorous to her—this experiment that had gone so badly awry. She wondered if she'd ever get her degree as a Historian, and half wondered if it mattered at all now.

You matter to me, George.

"This is quite serious, you know," said Dr. Harkase. "The pen *must* be recovered intact. Fortunately it is in the hands of a closed-cycle individual. Otherwise we could not prevent the application of penalties, Rena."

"I forgot to remove it when I left this morning," said Rena. "It's all I had to work with when I got there. I didn't think any harm would come of it—but I didn't intend to leave it there."

"I'm sure you didn't but that doesn't lessen the serious legal responsibility involved. The mark of the expert Historian is his skill in handling the accidental and the unpredicted to prevent them from controlling and altering the intended probability. I perceive that your skill will be tested to the utmost."

"Suppose that I can't return from Cell Four," said Rena morosely. "Suppose that I have to stay."

Dr. Harkase shifted his position and turned off the time screen. His face was only gently furrowed with lines that betrayed scarcely half his age.

"An appointment as Historian is hardly a trivial matter," he said. "I think I need not remind you young people of that. The concept of history as an experimental subject is in itself a daring one, one wholly outlawed until only a decade before my own lifetime.

"There has always been an element of personal danger to the Historian, both in the actual experiment and in the public response. The position of these closed cells of time, however, is perhaps the most dangerous experiment attempted for many years.

"It is entirely possible that you may not be able to return, though all indications are that you will—but you and George Brooks are the only individuals so far discovered with characteristics that will enable penetration.

"Could you make a satisfactory adjustment with this Brooks in case of emergency?"

"Yes, I'm sure of that. I'm perfectly willing to continue the experiment."

Satisfactory adjustment. That's their delicate clinical term for falling in love. Maybe Cell Four will be a wild and savage place. We'll knock it over, won't we, darling?"

She didn't know if he were still writing but she let her mind dwell on these thoughts to keep it clear of the things she couldn't tell him yet.

"I take it that you do not intend to carry out the original plan then," said Dr. Harkase. "The plan to become involved in a car accident at which time you would be transferred to Cell Four, allowing Brooks to associate it with the trauma of the accident?"

Rena shook her head. "That is a poor plan. Anyone who has constantly thought of negative twenty-six hundred as an age productive only of savages cannot realize the intelligence of individual specimens. George Brooks is not

so stupid as to fall into any such explanation.

"Give him the data that he would have after the transfer and he would deduce the entire experiment, at least my relationship to it, in a very short time. I soon decided that the only possible satisfactory way would be to obtain his voluntary aid. That is why I allowed the establishment of a strong personal relationship with the subject.

"I will tell him exactly what we want, who I am and where I come from. I will bring him here tonight to meet my family and you, Dr. Harkase. He will be glad to come with me voluntarily."

"You realize the value of the specimen, of course. If he refuses voluntary assistance it will be difficult to make use of him later. And we have searched a long time for another closed-cycle person besides yourself."

"I have no doubt of his willingness."

"You believe he will consent to remain there—provided you explain his affiliation beyond Four?"

Rena smiled softly. "I could persuade him to do, voluntarily, anything within his power. That is why my plan is so much better than the original one."

CHAPTER II

The Door

THEY had a date for that night. He was late but George still drove slowly toward the apartment where Rena lived.

He was still bemused by that pen of Rena's, writing snatches of thought that certainly were not his own. He had been unable to *make* it write anything that he wanted it to—not even his own name. It simple wobbled about, producing a meaningless scrawl—and then scraps of information about some mysterious "Cell Four" and admission from Rena, "I love you, George."

He had deliberately left it at the plant because that would give him better excuse to examine it further. He determined to say nothing to Rena about it until she brought up the subject. But where had she obtained it?

Hank's Drug had never heard of such a thing—quite understandably.

A half hour late, he finally knocked on the door of Rena's apartment.

Rena opened the door as if she had been standing there waiting for him. There was the faint scent of some perfume, nameless to him and faintly narcotic in its penetrating illusion of exotic flowers.

She smiled at him. "Come in, darling. Did you bring my pen—the one I left on your desk this afternoon?"

He was taken aback by the abruptness of her question. He had supposed she would hedge about the matter of the strange instrument.

"No—I didn't think of it. I was going to but—"

She took his arm and led him to the sofa before the fireplace. "George, darling, you can't lie worth a darn, can you?"

"That calls for a smile, lady, or better still—" He put his arm around her.

"Wait a minute. Let me tell you exactly what you did. You wondered why the pen wouldn't write for you as it did when I was sitting there. The more you tried the less it would do anything for you. Finally the clock moved around and you had to go and so you shoved it in your desk and locked it up with the idea that tomorrow you'd really tinker and find out what made it go."

"Well—"

Her expression suddenly changed. She leaned back against him, the white softness of her shoulders outlined against the dark cloth of his coat sleeve. She looked steadily into the low fire in the hearth.

"I'll tell you about that pen. I don't know quite how to start because, you see, it was made twenty-six hundred years ago—or rather *from now*."

"What are you talking about?"

"My pen. It was made in a day when privacy and truth are honored to the extent that your use of it this afternoon would have horrified a member of the

culture that produced it."

"You're talking plain nonsense, Rena. Where did you get that pen? Who made it?"

"Didn't it seem as if I were writing with it instead of you?"

"Yes, it did. I began to think I was going off my rocker. It was almost as if you were talking to me once or twice."

"It's nothing particularly marvelous—just a gadget. It's attuned by a very delicate mechanism to the waves of my thalamus—so that when I want to use it I simply move it along the paper. The mechanism inside, activated by my thought patterns, does the actual writing.

"It can write almost as fast as I can think. But for me only—no one else. If anyone else attempts to use it he may pick up my thoughts if they happen to be above what we call class-B intensity, which is the level required to operate the pen.

"But among its manufacturers it is unthinkable that privacy should be invaded through a misplaced pen. Therefore we have no fear of using it—or even of losing it. Another one can always be obtained."

"Where? Where can you obtain such pens?" He was conscious of his own voice in his ears but it seemed to come from a distance over a poor audio reproducer. "Who knows how to make them?"

"There are shops where you can step in and have a brain-wave check and get a stock pen adjusted to your own characteristics—shops in my own town, among my own people."

"But *where?*"

"Twenty-six hundred years—straight through that door!"

SHE pointed suddenly to a closed door across the room. He half rose, moving impulsively towards it.

She drew him down beside her again. "Wait, George. You can't get in there—yet. You'll have to listen to what I have to say."

He sat back slowly, searching her face with his eyes to find some clue to her meaning. He had a fleeting sense that a thin transparent barrier had suddenly risen between them. It brought a shock of fear that was like a blow beneath his heart.

"You have an unfortunate phrase in your language," said Rena slowly. "Time travel. It's unfortunate because your mind is conditioned by it to contemplate impossible paradoxes. We use a better term—historical extension. What you might call a time machine—we call an historical alternator.

"Your civilization has been built around the automobile and the electric generator for the past thirty years. Can you imagine a civilization built similarly around another machine—an historical alternator? That is the civilization I grew up in."

She paused and he watched her face in silence. He watched for some sudden wrinkling at the corners of her mouth or her eyes that would tell him this was something she had dreamed up to tease him. But there was none of that. There was a dreadful terrifying honesty of expression that told him that every word she had spoken was true.

It appalled him, the sickening gap of time that he glimpsed between them. He didn't stop now to question how it could be, how such a thing could be brought about or through what manner of technology it was born. He only knew that it was so.

He reached out a hand as if to draw her safely closer across that gap. "I have to believe you," he said. "But I don't understand it. Tell me about it. What is it going to mean—to us?"

"I'm a student in the University there, she said. "I'm studying to be an Experimental Historian. My coming here is a part of an experiment I'm doing for graduate study."

"And I'm—just a part of your experiment! Is that what you're trying to say?"

Sudden mist clouded her eyes as she scanned his face. "Do you think I would have *lied* to you?" Then a faint smile softened the hurt upon her face. "I keep forgetting you're such a savage. I for-

get that you've never known what it is to live in a culture where people do not lie to each other."

"I'm sorry, darling. I'm afraid I don't know what that's like. I know I don't understand a thing you're telling me and minute by minute I'm getting more scared that it means you're lost to me."

George and Rena looked at the city through the rain

"No—it will never mean that. The original intent of the experiment was that I should get you to accompany me to an era that is as yet unpenetrated but it was not meant that I should fall in love with you."

"Is that bad—for your experiment, I mean?" he asked whimsically.

"Not particularly. Provided I can still persuade you to go with me."

"You'd have a hard time talking me out of it but where are we going?"

"That's difficult to explain without your having a broad background in historical physics. Time is stratified in an extremely complex manner. We call these strata cells. There are certain ones which are completely impenetrable to our viewing instruments and from which we can draw no samples whatever with the alternators.

"Historians have been able to project inert samples into these cells but no personal exploration has been possible. For a long time the existence of these impenetrable cells was not even known because our instruments show other cells beyond them. Only careful mathematical analyses of the discontinuities involved finally proved their existence."

"Well, how can we go if they are impenetrable? And even if we can I'm not sure I want my wife romping around through ages that no one can get into."

"You don't understand. Every individual born has a certain inherent historical characteristic that does not follow any known laws of heredity.

"There are certain ones who have what is called an open cycle characteristic, who are permanently barred from use of the alternators. Their history is so intimately bound up with that of their environment that they could not be wrenched out of it without catastrophic consequences to the whole historical fabric. They are in the minority and are rather unhappy individuals. On a par, say, with a trailer tourist of your culture, suddenly deprived of his driver's license for life.

"Most of us have a spiral-like cycle—at least that is the nearest word description that can be applied to the mathematical formulation that describes them. Their history can be extended by the alternators. They move from one level to another of their spiral and alter permissible probabilities without harmful results.

"The third type is an extreme rarity, the closed cycle type. It was first predicted by mathematical formulations alone by my professor, Dr. Harkase. I was the first of the type ever discovered. We have searched through centuries of history for another. You're it."

"And what are the characteristics of our type?" asked George.

"We can move anywhere, in any time, and do just about as we please in any age of the world's history without having the slightest effect upon the general historical environment."

GEORGE laughed. "That doesn't sound very complimentary. You mean we can do any darn thing we please and we'll still never amount to anything because we can't affect history?"

Rena nodded. "I'm afraid that's about it. When I first learned of it I felt about the same as you. It's rather a disheartening situation in a way. We could be utterly destroyed and our passing would be as tangible as the well-known hole in a pool of water.

"But actually it's not anything to be greatly mourned. The effects of the other types are characterized mostly by duration rather than benevolence or usefulness. The waves of our particular splash simply die out sooner, that's all."

"No children, even?"

"That's an entirely different matter. Dr. Harkase says that you have a strong potential affiliation on the other side of Cell Four, to which we are going. Probably it means children."

"That's *something* anyway. I always pictured myself in the role of *pater familias*. But the pen—tell me what happened this afternoon."

"As soon as I left you I went back to the University to the class session in Experimental History. We were discussing this experiment and you picked up some of the things I was thinking while in class. My mind was wandering, you see." She smiled in recollection of what she had let him write.

"But *how*?" he exploded. "You say the University is twenty-six hundred years in the future. How could the pen respond to your thoughts across such a span of time?"

"That is an accidental but unavoidable nuisance feature of the instruments. Human thought is a process operating entirely outside the time-space continuum as understood in your physics. Time is meaningless at the level where thought mechanisms operate.

"The pen responds to its tuned stimulus as if time did not exist. There have been many efforts to block out this effect but so far they have been unsuccessful. Because of this there are serious penalties involved should one of us take a pen into another age.

"So far only Harkase and the other students know what I did but I must have it back. If it were permanently lost I might be forbidden to operate an alternator again and in addition be subject to an operation that would change my wave characteristic so that the pen would not respond.

"It's a long study to comprehend a small part of the ramifications involved in displacing basic knowledge tempo-

rally. You can understand, however, that it could have serious consequences. That is what is involved in the matter of the pen. So you must be careful. I'll come down for it early in the morning."

"How was I able to write with it the first time when it responds only to your thoughts?"

SHE smiled and he understood then what she had done.

"Sometimes I think you take too much for granted," he teased.

Rena stirred and sat on the edge of the sofa. "There's much more that I could tell you but that is enough for now. I'm going to take you to my home. You will meet my parents and Dr. Harkase. There will be a number of other students there also.

"You will glimpse incomprehensible facets of our culture but you will not be a total stranger to the people there. Nearly all of them have visited in this time. Be sure to say nothing of our marriage. I have not told any of them yet. And remember that, while no one there will ever lie to you, to them you will always be a savage."

George stood up and took her hand. "The thing I like about you, darling, is that you are so complimentary."

Together, they walked towards that door across the room.

This wasn't real, he thought. He was just George Brooks, engineer, on a date with his girl friend. She couldn't be talking seriously about a land of super-civilization centuries ahead of them in time. His emotional response was lagging far behind his intellectual comprehension of the situation.

It caught up when Rena opened the door.

Emotionally he had fully expected to see another room beyond. But there was nothing tangible to be seen. His eyes recorded only a smothering grayness that jellied faintly like fog confined behind glass.

"That's the way it always looks," said Rena. "The transition area distorts all sensory phenomena. It may make you a little sick or dizzy the first time but just keep hold of my hand."

He realized that she was pulling at him and that he was standing as if cemented to the floor. He relaxed and allowed her to lead him towards the opening.

CHAPTER III

The Music

IT was not like fog. She disappeared into it as if being swallowed by gray mud. And then he saw his own hand begin to vanish into the stuff as she drew him on. An involuntary response caused him to jerk back from it. He felt Rena's hand tug at him sharply as if in irritation.

There was no feeling. Light and sound vanished. It was utter absence of sensation. All that was tangible was the touch

[*Turn page*]

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of Rena's hand—and a sudden intolerable sickness in his stomach.

They came out of it before he had taken a third step. A deep breath of air and a moment of focusing his eyes on an object that held still was enough to wipe out the vertigo.

He glanced about.

"This is my room," said Rena.

IT was something of a shock, he thought afterward, when he first looked at the walls of the room that looked simply like walls. And the bed that looked like a bed. He didn't know what kind of surroundings to expect but he was prepared for any fantasy. The normal appearance of the room was in itself a shock.

The architecture and furnishings were severely simple. The only betrayal of advanced civilization lay in the exact proportions and subtle colorings.

"Since I do most of my studying here I keep the alternator here so I won't bother anyone else with my comings and goings. Spatially we're about four miles from our location in your time."

"But we only took a couple of steps!"

"That's all that's necessary. The alternator takes care of that. Let's go out and join the others now. Perhaps I should warn you about Mother. She will probably give you the most trouble but don't be dismayed by her.

"She's rather like your amateur tourists in some ways. She absorbs only a superficial knowledge of the cultures she visits. Her hobby is music and she will probably ask you to join in something she has picked up from her visits to your time."

He grinned. "Don't worry. I can take care of Mother."

His earlier reassurance was suddenly shaken when Rena started walking towards a perfectly blank wall. As she approached, it seemed to fade in one area and an oval section grew crystal clear. She passed through and turned. "Come on."

He followed, mouth slightly agape. He looked back as the wall resumed its opaque hue. "What a gadget! I'd like to take that back with me."

"Don't let Dr. Harkase hear any remarks like that or he will give you his special two-hour lecture on the legal aspects of temporal displacement of scientific knowledge."

"They can't put me in jail for looking—and maybe accidentally figuring out how something works."

She stopped, her face serious. "Once having passed through the alternator field you are forever within the jurisdiction of our laws. Don't ever forget that fact, George. It's extremely important."

They moved along a short hallway and came out into a large room which was half-ceiled and half-open to the sky. Only later did George realize that the "open" section was actually covered with a transparent dome. Household living space seemed to merge indistinctly into outdoor garden.

There were a dozen or so people standing in conversational groups of twos or threes about the room. Their eyes turned uniformly in his direction as George entered beside Rena.

For the first time the full impact of the situation struck George. These citizens of a super-world twenty-six hundred years beyond his own, viewing him, a strange anachronism. He wondered how a group of his own people would have reacted to the appearance of, say, one of Pythagoras' pupils in a social gathering.

He tried to shake off the shrinking feeling of inferiority, knowing the analogy was imperfect. These were all seasoned travelers, tourists in time. They understood him for what he was. They did not expect him to act according to their standards.

They expected only the standards of a savage, he thought, with a slightly bitter smile as he faced them. Even if this were a civilization where people did not lie to each other did it mean they would be kind to a savage?

COMING toward them was a woman who looked as if she could be Rena's twin. He could scarcely have told that

she was any older. It was not in the clear tone of her skin that matched Rena's nor in the black fall of hair about her shoulders.

Rena said, "Here comes Mother. It's first names only among us. I forgot to tell you, George." And to her mother, who came up, "Doran, this is George. You have heard me speak of him."

The woman extended a hand and smiled at George. "I haven't heard of much else lately except you and this experiment with Cell Four. We're glad to have you here, George.

"Most of us have visited in your time. We'll do our best to make you feel at home. Old travelers like us know the discomfort of being thrown out of one's familiar culture. See to refreshments, Rena, and I'll introduce George."

There was an indefinable tension, George thought. It was impossible to tell whether it was in the others or in himself. More likely the latter—but Rena's mother was overdoing it, trying too hard to make it seem like home. Like handshaking—Rena hadn't told him it was no longer a custom but he knew from the way her mother did it that it was not their way.

He met Rena's father next. Cramer was a portly man who would have been a Solid Citizen twenty-six centuries earlier. Then there was Dr. Harkase.

It was more difficult to catalogue the Historian. He seemed to possess an undercurrent of knowledge that gave his face a near cynical expression. George wondered if he knew already the details of all the rest of George's life.

The others were all students at the University, classmates of Rena. They were gracious, civil and friendly but in the back of his mind George could not erase the image of a Neanderthal-like character, dressed in a leopard skin and clutching a knotted war club—himself in the presence of this company.

The circle completed, Doran said, "I thought perhaps you'd like an evening of music. I obtained some of your own especially for your visit. Rena mentioned once that you were a singer. I'll get some of the others."

"Well—I might have mentioned to Rena that I did some barbershop singing in college but that's about the limit. Don't get anything beyond *Clementine* or you'll be over my depth."

Doran frowned. "*Clementine*? I don't believe I know that one, but I do have one of your loveliest quartets."

She beckoned to some of the others and handed out some music. George gulped and choked when he saw what it was—the *Quartet* from *Rigoletto*.

He saw Rena coming and grimaced frantically at her. She came up and took his arm. "Don't make George perform tonight, Mother. He'd much rather listen to us."

"I really would," said George hastily.

"Well—of course, if you'd rather." Doran beckoned to her husband.

"You take the baritone then, Cramer. Let's see what George thinks of our rendition of his music."

She sat down at a keyboard instrument that was too small to contain strings. The moment her fingers touched the keys George knew it would make a grand piano sound like a spinet. And then the group broke into song.

He sat back in unbelief. His own abilities were strictly of the barbershop variety but he could understand operatic quality when he heard it. The casual art of the four singers was something that would have made Metropolitan directors weep—and run for a contract form.

He should have been enjoying it, George thought, but he was miserable. He looked at Rena. She smiled and pressed his hand. How could he possibly attract her, a product of this culture whose casual evidences made him feel as if he'd swung down from the trees only yesterday? What did she see in him that she found in no member of her own people? Was it possible that he was only an essential element in her experiment after all?

In vicious anger at himself he forced the thought from his mind—but it wouldn't leave. It only shrank back and hit in the dark recess of his subconscious. He looked at her and she seemed to read the doubt in his mind. She leaned

over and whispered in his ear.

There was other music then. Rena's mother sang and her voice held George against his will. Compared with it, he thought, Erna Sachs would have resembled a factory whistle.

Dr. Harkase at last suggested, "Rena, let's have a scene from the University play you are doing next month. The one you and Bradwell have together."

"Oh, no. Let's have more music. You sing one of our own compositions, Dr. Harkase. Let George hear what our music is like."

"You can't refuse your Professor," he insisted. "I think we'd enjoy some drama."

THEY made it impossible for her. She left George's side and he felt more alone and inadequate than ever, though Rena's father moved over to join him.

Rena took her place in the center of the room with Bradwell. The fellow was a graduate in math at the University. George shuddered to think what Bradwell might be able to show him in that field.

They were beginning. Everyone seemed to understand what it was about though it was a single scene lifted from a long classic drama. To George the allusions to this strange culture were unintelligible. But the emotion of the scene would have been common language in any age.

It was Rena's scene. Bradwell was only a foil against the torrent of emotion with which she dealt.

While George watched Rena seemed to become a stranger whom he had never met. As the character in the play she became a tormented being, caught in a snarl of tangled loves and hates. The fury of anger and the tenderness of love mingled with clashing discord in her voice, her expression, her entire being.

It was something beyond mere *acting*. George felt a thin shadow of horror overlay his mind. Rena was inseparably of her own age and time. What he knew of her was like the knowledge gained by looking at sunlight while all the vast spectrum lies on either side, unknown and undetected.

He sensed now some of the unknown that was Rena.

She finished. He felt physically weakened by the barrage of emotion that she had produced.

She returned and sat on the other side of him from her father. She was partly breathless when she spoke. "It's our annual play. Did you like it?"

"You've seen plays in my time. What do you think? I didn't know you were such an actress. I'll bet you sing as well as your mother too. Is there anything that the average citizen here can't do?"

"Of course, darling. These things are simply the skills and hobbies of your own day brought to greater perfection. The skills of genius in one age become the hobbies of the citizens in the next. Just as Pythagoras would not have passed through one of your high schools on the knowledge out of his own culture—"

"That's hardly the answer," interrupted Cramer quietly. "Perhaps you haven't explained to George about genetic control."

"No," laughed Rena. "I left that for you. I knew that you would expound at great length on the benefits of g. c. He's a Division Geneticist," she explained to George. He thinks the world spins on its genes."

"The term implies any of a number of possible techniques to my mind," said George. "What does it mean?"

"No such barbarous procedures as I'm sure you're thinking of," said Cramer gently. "You must understand, to begin with, that all of the population of the Earth does not participate in the program. There is nothing compulsory about it. The only force is that of social pressure.

"With five hundred years of genetic selection in one's ancestry, such as Rena has, he simply does not marry outside of that group that shares that history of selection. With seven or eight millions who have such a history it is not difficult to mate within one's own category.

"Occasionally one steps over the line

and mixes with the unselected segments of the population. That automatically grades his own posterity downward. We have pedigrees, which are simply gene charts. The pedigree divisions among us are seldom crossed."

George looked across at Rena. Her face was expressionless as if awaiting for his own reaction.

Savage—irrevocably savage. No training, polish or veneer could be applied to him which would render him anything more than savage in their midst. They would be kind, they would not lie—but they wanted none of his genes mixed with theirs.

Rena—he understood now why she had warned him that he would always be a savage. It drowned the faint hope that had been rising within him that he might find a place among her people.

His face felt hot and his throat dry. He said, "How is control accomplished—or is that something too far beyond my comprehension?"

CHAPTER IV

The Gulf

IF Cramer detected the trace of bitterness he ignored it. He laughed. "The theory is simple if not the technique. From the beginning cells to be mated were controlled gene by gene. Random hereditary manipulation no longer existed and deliberate selection of desired genes was made.

"If a desired characteristic lay in a single recessive gene the dominant undesirable was blocked out so that the child possessed the characteristic of the desired gene.

"Generation by generation this process has continued so that all of us have hundreds of characteristics we want instead of the few picked at random for us by heredity. But scores of these might disappear in our offspring with a single random mating.

"As a result those of us whom you see here have characteristics in abundance which were once reserved only for the so-called 'gifted.' The least of us can make such music as only the greatest artists of your day.

"Emotional sensibilities are heightened, intellectual abilities and physical and mental health are abundant. And we have only begun to realize the possibilities of the human body and mind. Do you wonder that few of us care to abandon such a pedigreed heritage?"

George shook his head. He felt an almost unbearable impulse to escape. He knew without a doubt that Cramer understood the effect of this revelation upon him. The geneticist was aware of his squirming desire to hide his inferiority like some uncleanliness suddenly revealed in this immaculate company. And Doran had known it too, he thought, when she had tried to get him to join their singing. She had done it deliberately.

George said, "What of the others—the lower castes who have not participated in the genetic program? Can nothing be done for them?"

"Originally the plan was made available to all who would participate. I'm sure from your knowledge of your age that you can appreciate the slowness with which it caught on. But eventually the facilities were overburdened and those who had participated for three or four generations were so far ahead of those who hadn't that a natural division sprang up.

"For a time no new families were admitted to the program. That caused serious conflict. Now we have in operation numerous plans on different levels and are building them up as fast as they want it. You would be surprised to know, however, how many hundreds of millions of people still refuse to have anything to do with it."

He glanced up. "I think my wife has been trying to get my attention. You'll excuse me, please?"

Rena moved closer to George.

"So now I know," he said with undisguised bitterness.

"Now you know—why we have to go

away from here," said Rena softly.

"What else can you do that I can't? Besides singing and acting like the best professionals of my time. ESP? Telepathy? Middle age at ninety?"

"Darling, please!" Rena's face was distorted with pain.

"Are there any of those things?"

"A little—just a little. I'll tell you about it but we can't talk now. Oh, darling, don't look at me that way. Don't you see? I chose *you.*"

"I'm sorry, Rena." George hit his lip in tension. "It gets me a little to realize that I really am a savage in comparison with you. I thought it meant just a difference in culture and learning, not a difference in kind."

"That's not it. Please don't say that. But here comes Dr. Harkase. He'll want to talk to you about the experiment. I'll be back in a minute."

The room and the people seemed to recede with Rena as she walked away. George felt alone, locked behind glass barriers he could not cross.

The room came back into focus with the approaching figure of Dr. Harkase. He sat down and looked across the room thoughtfully.

"A wonderful girl, Rena, and a wonderful student," he said. "She'll be one of the finest Historians we've ever had. There is some risk in her approach to Cell Four but her return is quite reasonably certain."

HE turned to face George directly. "I want you to know that we appreciate very much your willingness to cooperate. I suppose Rena has spoken briefly of the nature of our work?"

"A little. I can't say that I understand any of it, however. She spoke of me as a closed-cycle temporal type and implied that it means a total historical impotence, which doesn't seem to be a very flattering situation."

"I'm not so sure that is the entire truth," said Dr. Harkase. "Our own theories are in a state of flux at the present time. You see the Cell Four represents a very critical historical situation for us.

"Many years ago we made certain alterations that set us off on a new probability branch. At that time we were unable to detect these closed cells. Now that their existence is determined, we find we are approaching one. Four is just six hundred years ago.

"Beyond it—there is just no beyond as far as our instruments can detect. It's as if it were some kind of bud at the end of a tree branch. Only a very few of us know the seriousness of the situation. We would go back and change the original probability alteration but it is irreversible.

"So we've got to find the meaning of these closed cells and what lies beyond them. If there is nothing we've got to find some means of grafting back into the main stream we left. That involves paradoxical impossibilities which we cannot resolve at present.

"I am doing some new work involving closed cycle histories, however, which indicates that they may be a factor in such resolution. The closed cycle was rather a theoretical freak, much neglected until the discovery of Rena and you. Only since then has there been renewed interest."

"But she spoke of an affiliation between me and the other side of Cell Four. If there is no other side—"

"What I was speaking of to her was that there is just one slim finger of probability between the Cell and the main stream we left. You are involved deeply in that probability—which is not a definite link, you understand. I am inclined to believe you will be instrumental in resolving our difficulty."

George glanced at the little knots of polished people across the room. His lips compressed involuntarily. "And I'll still be a savage—"

"Eh—what's that?"

"I'm sorry. A savage has difficulty in staying out of character for very long at a time."

"I see. You've been talking to Cramer. Perhaps a moment's reflection might help you to understand that while we all benefit from the science we are not all such avid geneticists."

"I think the segregation of your society answers that."

Harkase sighed. "Young man, if you could solve that problem for us you would have bested the scientists of the last half millennium. Segregation has led to prejudice, hate and war. But what are we to do? We tried compulsory genetic control for a brief time. That brought revolt and civil war.

"Should we abandon what we have gained? Worst of all the portion of humanity outside the program seems to be receding farther and farther. Their genes are almost barren of art or science. Many groups of them are nearly subhuman. So far there is no answer."

Dr. Harkase rose to leave. "I'll notify you as soon as we are ready to extend you."

George left his chair and strolled across the room towards the garden. Through the invisible dome he could see the stars. A sense of relief came over him as he watched them. There at least was something familiar. Twenty-six centuries of history made little difference to the stars.

But what vast changes it had made in humanity. Genetic control had produced a new race, he thought. He had only glimpsed the skills they possessed. But Rena had admitted the others. And she was one of them.

He was startled by a step behind him. "Good evening, sir. I was hoping I'd get a chance to speak with you."

It was Bradwell, the young mathematician.

"Hello," said George. "I enjoyed your performance very much."

"Thank you. It was Rena's, of course. I'd like you to see the whole thing if you expect to be here when we put it on."

"I don't know. I think perhaps I'll be leaving soon. Dr. Harkase seemed to indicate that he'll need me within a short time."

BRADWELL stared at the horizon of the sky beyond the garden. "I've never had much to do with the alternator," he said thoughtfully. "I took a short extension or two several years ago but I didn't like it. My earliest studies were in the physics of historical extension but I soon abandoned them."

"Why did you dislike the subject?"

"I think it's detrimental to our civilization. It has deadened our own initiative. You wouldn't know from your short visit here but we're not a productive people. We're parasites. We rely on what we can pilfer from other ages. We rely on historical extensions to produce improvements.

"We change the lives of others to improve our own but we produce nothing, build nothing, discover nothing. We live in a sterile age. Personally I think that's why we're approaching Cell Four. We sidetracked ourselves long ago and extinction is the only answer now."

"You could go to some other age."

"Not on the main branch. And it doesn't work, anyway. Something goes wrong with a man. I don't know what it is but there's a difference. A man withers and dries up. I've seen them come here. You're not the first, you know.

"You think you could live here. You think you could marry Rena and live among us—"

"I didn't—" George interrupted in confusion.

"Don't you think we could tell?" Bradwell said. "We sense emotions as easily as spoken words. The wonders of genetics!"

George could not tell whether it was in bitterness or mere cynicism. George felt naked.

He glanced about him, felt the eyes of the others upon him. There was nothing he could hide. Why had Rena even warned him not to betray their marriage plans? Surely she had known they would sense his feelings towards her.

"It wouldn't work at all," said Bradwell. "You could never keep up with Rena. She's ten thousand years ahead of you right now. You think you could learn but you couldn't.

"And it's the same with us when we go to another time and another people. We can visit but we can't live there. It's every man to his own time and

people. That's why I don't use the alternator any more. I don't want the contamination of other cultures. I want to produce what I might produce of my own will and ability."

George looked into his eyes and almost shrank before the passionate bitter fires in the man's eyes.

"It's the same for you," Bradwell said fiercely. "In your own time you can build and create. You can be an entity in your own right. That you can never be here. You'd better go back.

"As for Rena—you will not lose her. You never had her."

George backed away, his glance slowly covering the room. They were standing still and silent in groups as if talking to each other—but they were not talking. They were waiting, waiting for his answer. It hadn't been just Bradwell who had spoken to him. It had been all of them. Like a wolfpack they waited for his capitulation.

And they were right, he thought. So damned right. He had known it since that moment when Rena grudgingly admitted her superior faculties. Marriage between them would be only miscegenation.

"Yes—I'd better go back," he said to Bradwell. "Can you help me? I wouldn't want Rena to know. Tell her—just tell her I'm too much of a savage for her."

"I'm sorry," said Bradwell. "They should never have come to you. I'll help you get away if you like."

It didn't occur to George that he should say anything to the rest of them. They watched him follow Bradwell out and they knew what was happening. Blindly he urged the scientist on. They came to Rena's room. Bradwell seemed to have no expectation of meeting her.

He led George to the machine. "I'm going to block this after you're gone. That will mean there will be no further possibility of your coming here. This is your own decision—be sure it's the one you want to make."

George nodded dumbly. "Go ahead. I don't want to come back. Rena will not remember for long, I'm sure."

There was the rising sound of commotion in the hallway beyond the room, the sound of running feet and a cry—*"George!"*

"We'd better hurry," suggested Bradwell. He opened the door of the machine. The grayness swirled before George.

"Yeah—we'd better hurry." He walked into the fog, the sound of Rena's voice still in his ears.

CHAPTER V

The Block

SHE burst into the room as Bradwell made a swift movement. His hands jabbed at the panel of controls on the wall. A darting red glow splashed through the gray fog and then it was gone. The door opened only to a shallow chamber lined with polished metal.

"Brad!" she screamed. "Brad!"

She rushed to the panel and looked at what he had done. Her body seemed suddenly without life. She moved, unmoving, scarcely breathing.

Footsteps sounded behind her on the soft carpeting of the floor. Her father's hands touched her shoulders. "Rena."

She turned slowly, the life gone out of her eyes. "You were all in on it, weren't you?"

"We couldn't permit you to do what you planned," said Cramer.

"My life is my own. What gives you the right to destroy my plans and hopes?"

"You are all that I have to give to the future," said Cramer pleadingly. "Five centuries of gene selection—you are the best that a thousand ancestors have to offer the future."

"Am I their prisoner?"

"You are obligated."

"You blocked him," she murmured. "Blocked a hundred years before and after. I can never see him again—never as long as I live."

"You wouldn't have come back from Cell Four and left him there," said Dr.

Harkase. "We couldn't take the risk of your not coming back merely because you want to stay with him. We would have gained nothing by the experiment and would have lost you. As it is, we are quite sure of your return."

"You have lost me anyway!" She faced them with a sudden fury that made them recoil. "I hate you all. And I will never forgive you."

Bradwell moved impulsively toward her. "Rena—"

"Get out now. Get out and leave me alone."

They turned and moved toward the door without speaking. Her father's shoulders sagged but Rena felt no pity for him.

The door opaqued behind them and she pressed a stud on the wall that locked her in. Only then did she fling herself on the bed and let the sobbing cry escape from her throat.

* * * * *

George Brooks shook his head and raised slowly on his elbows. There was grass under his face and a shrill singing in his ears. Hard gray morning light showed the landscape about him. He was lying in a park.

Blearily he looked around and struggled to his feet. He'd better move on if he didn't want to be run in.

The granddaddy of all hangovers, he thought dully. It hurt just to move his head. Every bolt that held his gray matter in place seemed to have been sheared off at once.

He sat down heavily on a green bench and tried to think. Why in thunder had he gone out and got so drunk? Seemed as if he and Rena had had a date but he couldn't remember where they'd gone. He couldn't remember taking her to any bar or club. She wouldn't drink anyway. She never touched the stuff. But what had happened to her? How had he got such a hangover?

He remembered then—the vague dream of Rena, an anachronistic Rena who had come from some distant age to take him to a far-off time.

A crazy kind of drunken dream.

Crazy—

Like a surging blast of electrons realization flooded through his nerve channels, straining synapses, choking the involuntary functions of his body.

He crumpled on the bench and cried in rage. He remembered then the bland face of Bradwell, the mathematician, the predatory circle of civilized supermen attacking with their inhuman powers of mind.

How super-civilized they had been! Nothing so crude as "Throw the bum out!"

No—one by one, they had invaded his mind, planted a seed of suggestion. A suggestion of fear and retreat because he was a savage and they were supermen. He remembered Cramer sitting beside him. Now that it was over he could recall the sensation of their impressed thoughts even though he'd been unaware of them at the time—unaware that they weren't his own thoughts.

And Bradwell. He knew the answer to that, too. The fellow hoped to marry Rena himself.

GEORGE'S fists clenched white with the yearning to smash into that smooth face. He groaned with the sickness of realization of what they had done to him.

Rena had seen him go, he thought. Those had been her footsteps and her voice he had heard in the hall. What would she think? That he had deserted her? But she would come back. She knew him better than that. She would come for an explanation.

Bradwell's block. No further possibility of returning, he had said. Never see Rena again—

And then the one unsurpassable lie. "This is your own decision—" They would not lie to him, Rena had said. They had merely forced their wills upon him and called the result his own. How little Rena knew of her own people.

"Have a little too much last night, Buddy? Maybe we'd better go down to the station and sleep it off."

George took his hands away from his face to stare at the uniform trouser legs

in front of him. He got up wearily.

"I'm not drunk, officer. Just taking a walk before breakfast and got kind of sick. I'll be all right."

The policeman searched his face sharply. "Okay, Buddy. But take care of yourself. Better get a meal into you. You don't look so good."

He went on down the street, vaguely aware of his location. He walked for a long time and went in to a dirty lunch counter for something to eat. It made him feel little better.

There would be police investigations, he thought. They'd ask him questions —questions he couldn't answer. They might accuse him of murdering her. He wondered if he ought to report her disappearance to the police.

His thoughts were snarled in foggy indecision but he decided against the falsity of reporting her missing. Let them come after him if they wanted to. It made little difference.

He walked in the clearing air again. He understood more thoroughly what had happened to him. The powerful interference that Rena's people had poured into his brain had acted exactly like alcohol, taking over control of his senses momentarily and leaving his own blunted and helpless afterwards. That's why he had all the symptoms of a hangover.

He tried to think of the future—a future without Rena. He could picture only gray blankness. There was no future for him without her. But somehow a man has to go on living. His bodily processes continue to function and he has to support them.

After an hour's walking he remembered his car still parked by Rena's apartment. He returned to get it and drove to his own rooms. He changed clothes then and called Sykes.

"Boss? This is George. I'm a little late this morning."

"Is that news?"

"Rena and I agreed to disagree last night. I've got a head like a washtub this morning but I'll be down by noon."

"Lay off the bottle, you dope. Don't you think anybody ever went through this before? It happens all the time. By the time the wedding's over you'll both be laughing at it. Why, I remember—"

"You don't understand. She's gone. Pulled out of town. Given up her job and everything. I don't know where she's gone."

"You must have some idea where she could go."

"I don't. She said I'd never see her again. Forget about it, John, but I just wanted you to know. You might pass the word along the grapevine, so the guys will lay off a little bit. I don't think I could take much ribbing today."

"Okay. I'll put the police on her trail for you. Don't be such a dope. I won't tell the boys anything. Come on down and get to work. When the cops locate her take her over your knee and let her know who's going to wear th. pants. You might as well get it settled before hand."

"No, I don't want you to call—"

But Sykes had left. George looked at the phone in his hand, then slowly placed it in the cradle. If he did not protest with excessive urgency it would look funny and Sykes would have to testify to that effect later.

He sank down on the bed, wishing he never had to move again.

Death, he could have understood. Men's minds are made to find reconciliation with the death of loved ones. But this unfathomable gulf of time—he could not do battle with despair on such grounds. His mind retreated wildly before the thought that he would be dead and turned to dust for twenty-six long centuries before Rena ever came into existence.

WHEN he reached the plant during the noon hour it seemed like some strange and alien place. It didn't seem possible that it had only been last night he had left it, looking forward to a date with Rena.

Most of the engineers were out. Only a couple were bent over their desks as he strolled in. He waved absently to them.

He sat down at his desk. Just twenty-four hours ago she was sitting across from him, he thought. He visualized her there, posing as a technical journal writer. She must have been amused by his designs that would seem so clumsy and elementary by the standards of her world. But she would not have laughed at him. She had respected what he had done with the knowledge he possessed, he thought. That would be her way.

He thought of her grimacing over his mathematical theories. It must have seemed so elementary, yet she had pretended it was difficult. He saw her writing, copying his work with that fantastic pen of hers—

That pen.

He jerked open the middle desk drawer. Almost reverently he picked up the pen—the one undeniable assurance that he had really known her, that she was not some fantasy of his mind.

He held it gently in his hand. It was worth a fortune if he could find out its secret but he knew he'd never try. He could not risk the one precious testament that he had really known and loved that girl out of time.

Idly he held it in position and touched the point to a scratch pad. It seemed corpselike in motionless stance.

Suddenly his hand trembled almost uncontrollably. That point—it *wasn't* motionless. Feebly it seemed to be wriggling with volition of its own, making a small circle of curlicues on the paper.

For a moment, George could not control the trembling of his hand sufficiently to move the pen. He laid it down and clenched his fist viciously, shaking it to restore some sense of voluntary control.

He grasped the pen again and moved it swiftly across the pad as he had seen Rena do. His breathing all but ceased.

—so tired, George. I've been sitting here, thinking constantly since the moment you left. I'll have to rest. In an hour I'll try again. I'll repeat through the rest of the day at hourly intervals.

I can't know that you're reading this but I pray that you have my pen and are watching it write. I can't even be too sure that it's crossing the block. We have no way of knowing whether it will do that or not. In another hour I'll repeat everything. So tired, darling—

The pen continued with only a wobbly line. He laid it down and slowly wiped the sweat from his face.

The implications of the intangible line of communication filled him with a bursting sensation. It was like a one-way line from a living tomb. All his life—as long as she tried to reach him—he could receive her thoughts.

But she would never know it. He could never reach her with his. Never could he let her know that he understood. He thought of the years to come in which each message from her would be like some opiate that would give him strength to go on until she called again.

Even as he thought of it he knew that it would not go on forever. Like him she was sick now with the tragedy of their betrayal. But she had a life to live too and one day she would forget to call to him.

He shook his head savagely and got up. He couldn't just sit there, his emotions churning his insides to fury. He strode out of the lab, out of the building into the sunlight, carrying the pen and pad with him.

He walked the whole hour, trying to keep from thinking. When the time was up he went out in front of the building and sat down against the sunlit brick wall beneath a dogwood tree. He touched the pen to paper.

Almost to the second, it resumed.

George, darling, for what must be the hundredth time, I am trying to get across to you. I can't know if I'm crossing the block or not but it's the only chance I have ever to see you again.

I know what they did to you. You must know too that they forced you to go back. It was a bitter evil thing to do. I think Bradwell even tried to destroy you by shifting the spatial coordinates. But the alteration was so slight that I suppose you returned quite close to my apartment.

That is just as well, perhaps. No one but you knew I occupied the rooms so just stay away from there and no one will think anything is wrong by my absence. None of my belongings are left there.

I could bring them before our courts for what they did but it would not bring you back to me. Only one thing can do that.

His hand began shaking again almost beyond his control as he read that last sentence. He was almost afraid to go on if she were to raise false hopes of their seeing each other again through some wild scheme she must have devised.

You can never be reached by an alternator again, George. I can never reach you again. This is what the block does. But you could come to me.

They know you have the pen but they have no way of knowing that I am communicating with you by it. They cannot see you through the block, just as I can't even be sure I'm reaching you.

If I am getting through to you, we are safe. And you can come to me but not here—or anywhere else they could reach us. We would never be free of their interference with our lives.

They are still going to let me go to Cell Four, however, according to the plans of the experiments for my graduate study. You can meet me there, darling, where they can never follow. Whatever it is, whatever kind of world it may hold, we can be together there for the rest of our lives.

He couldn't understand. Couldn't she realize that he had no way of getting to Cell Four, or any other era besides his own? Had she so forgotten?

You are wondering how this can be done? I will teach you to build an historical alternator. It is a dangerous thing to do. I am breaking one of the strictest laws of my culture. They would penalize me for life if it were known. But it is a risk worth taking.

One advantage on our side is that you, as a closed cycle individual, cannot disclose the information or dispense the machine in any way that will upset the present probabilities.

Your danger lies in the fact that the machine cannot be properly checked and tested by an experienced alternator technician but I will try to give you instructions as completely as possible.

Whatever the risk it is worth it to take a chance on being together and free from interference. This is all for now. I'm repeating myself at hourly intervals through today and tomorrow. After that I shall begin sending the instructions you will need to build the alternator.

The pen stopped abruptly.

CHAPTER VI

The Error

A BRIGHT shaft of sunlight had moved across him, half blinding him to his surroundings, but he remained sitting there. The image of Rena was set in the sky and his senses devoured it, the faint flush of her cheeks, the black shining hair about her face.

He waited the next hour and wrote the things she sent. It was almost word for word as before but for him there was newness, the sense of her presence. He had lost all regard for the gap of centuries that separated their parallel time sets. For him she was writing "now."

It was late in the afternoon when he went into the plant. Sykes was the first to see him.

"You had me worried, George. I called your place a half dozen times and nobody answered. You haven't had your foot on a rail all afternoon, I hope?"

George shook his head. "No—but the effect is about the same."

"Well, I put the cops on her trail. That'll let her know who's boss. I tell you you can't let these things get out of hand. If she gets away with it this early you're sunk."

George managed to grin. "I appreciate your understanding and advice but I wish you hadn't notified the police. Rena is all right. She just walked out on me."

He returned to his desk. The pen in his pocket seemed like a hot steel bar against him. What if something happened to it? Where could he keep it safely? He dared not carry it around. It wouldn't be practical to put it in a bank vault but he felt that if he left it in the plant lightning or fire would be sure to strike.

In the end that was the only practical place. He'd keep it locked in his desk. It would be as safe there for the period that he would need it as any place on earth.

He stabbed with a finger at the row of books on one corner of his desk. He picked up his lab notebook and turned to the integrator specifications. He resumed work at the point he'd been that day—was it only one day ago?—when Rena had asked for new material.

He began transforming the equations.

"Boy, do you look like you've been out all night! I've looked all over for you. Sykes told me you'd been on a bender."

George looked up into the eyes of Carl Bacon, the integrator engineer. "Just got here," said George. "Had something of a bad time."

"Rena?"

"Yeah—she walked out on me."

Carl nodded with supreme confidence. "She'll be back, old man. Don't give it a thought. Give a look to what I've been doing to the gadget and let your worry department have a rest."

He would have been more interested if Carl had jumped off a high bridge, George thought miserably, but he leaned over to give attention to Carl's sketches and equations.

"I took one of those tempora tubes and redesigned the suppressor with a magnetic instead of an electrostatic field and reshaped the thing to hyperbolic conformation. Then I tried souping up the current until the space in that orifice is absolutely and completely saturated with electrons like a rummage sale swarming with housewives."[*Turn page*]

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"And what happens?"

"What happens? Man, the things have to speed up to get through. They're pushed from behind and squeezed from the side. They take off along that hyperbola."

"How much?"

"I don't know but here's the gimmick—there's a forty-millisecond delay between control excitation and results at the end of the hyperbola. By extending it the time can be made even greater. That's a heck of a lot more than the simple phase differences we were getting before.

"And here's the best—or worst of it. By reversing the field, the lag can be made a gain. The stream actually knows what's going to happen to it—*before it happens.*"

George squinted up at him. "And you talk about *me* being on a bender. Let's both go down to Joe's and spend the rest of the afternoon on a high stool."

"That's what I thought. I haven't told anybody but you. Come on into the lab and I'll show you."

They worked half the night. George felt some of the grief-inspired tension dropping away from him as he became absorbed in the unbelievable phenomenon that Carl had described. He insisted on rerigging the experiment from scratch. It was still there. And there was utterly no explanation.

As midnight approached, he straightened up and stared at the equipment. "Hook two of those things in a kind of push-pull arrangement with pulse data modulation and they could memorize all the numbers written since your great grandpa swung out of the trees and started counting on his fingers."

"We have an integrator, huh, pal?"

"Let's keep it under wraps a bit until we find out just what we can do with it. But for now let's get some shuteye. I'm dead."

He made certain the pen was in the desk and locked the drawers before leaving. At his rooms he took a quick bath and fell into bed. He lay there for a time, half tormented by the fact that he had not observed all of Rena's schedules. She had told him she would simply repeat herself—but there was still a chance, he thought, of something going wrong, of some new information he might have missed.

And if the whole scheme should fail and contact be lost with her he'd regret every minute he'd passed up.

WITH relief he made contact on the first schedule the next morning and there was nothing new. The aching urge to answer back, to speak to her, was almost unbearable. He felt as if the force of his longing could almost project his thoughts across the ages to her.

He spent the day with Carl, experimenting with the tempora tube, trying to find out what it would do, trying to explain it. He stopped long enough in the afternoon to keep one schedule with Rena. Reassured, he continued the lab work.

The following morning he arrived at seven and locked himself in a small screen room. He hung a do-not-disturb sign on the outside and put a pair of cans on his ears, just for appearance. He sat there with a pad on his knees and Rena's pen in his hand.

It came at eight.

George, darling, this is it. They want me to go in just one more week. I can't ask for more time without arousing suspicion. There's no excuse I can give to hold back longer. If only I could know that you are there!

I'll have to give you a lot of the math involved in order for you to understand how to construct and calibrate the machine. I'm trying to remember accurately how far you can go. I'll simplify all I can. To begin with—

As the stream of abstruse equations began to pour forth faster than his mind could follow he felt sick inside. New concepts, new manipulations that he had never dreamed of appeared on the paper. A week, she said. Did she have the faintest comprehension of the magnitude of the task she was setting up for him?

He wrote steadily through the morn-

ing hours. Once Carl banged on the door and George waved him away, pointing to the cans on his ears. Carl yanked at the door but finally gave up.

Fearful of missing an important formulation George kept the pen moving steadily. His arm and fingers began to ache. He wondered how long Rena could go on steadily without interruption. It required an effort and clarity of thought far greater than that of ordinary speech, she had told him.

At noon, she paused.

That's about half of what you'll need of the math. You must be tired writing for so long. It tires me greatly because I have to maintain the highest possible level of visualization in order to penetrate the block adequately if at all.

Before we rest let me give you a partial material list to mull over and begin accumulating if possible. Most of the electronic equipment you can get in your labs, I'm sure. Full details of procurement will have to be up to you, of course, but I've simplified everything as much as possible.

Swiftly an itemized list began appearing beneath the other writing. As it lengthened, George uttered an audible groan.

There were enough components there to build a GCA. And he was supposed to do it alone—in a week.

—a half hour, George. There is so much to do—

HE laid down the cans and leafed through the sheets he had covered since morning. He had two junior engineers working on his current project, which was about wiped up. He could put them on it, he thought, without their knowing anything of what it was for. They weren't very bright boys anyway. He ought to have help on the more technical end—but that was out.

He could charge some components to his project and get the rest from the junk room. With only a week to go it would take that long for the paper to go through the mill, for somebody to discover there was monkey business going on. He made a couple of separate lists and stepped out to call one of his juniors.

"Jack! I want you to start expediting this stuff. Here's a list for Marvin, too. Clean up our large screen room this afternoon and start gathering this stuff together in there. We've got a hot project."

Jack grinned. He had never known George when he didn't have a "hot" project.

The model-shop work would be the toughest. There was a large order of metal stock, sheets and bars on the list. That meant machine work. Sykes would start asking embarrassing questions before much of that came through.

But his risks were puny beside Rena's, he thought. He wondered what they would do to her if they ever found out.

He glanced hastily at the clock. The time was nearly up and he'd had nothing to eat. He called to a lab boy. "Get the cafeteria to put me up a gallon of coffee, will you? I've got some concentrated thinking to do this afternoon."

Rena kept at it steadily. She made no pause for side remarks—only the steady unending flow of technical information came from the pen. Quitting time at the plant came but she gave no indication of letting up. George's whole body ached from the strain of sitting there steadily, his only movement the guiding of the pen which he didn't dare stop for an instant.

She gave him fifteen minutes' rest at six, then resumed and went steadily until midnight. She had completed the math, sketched the main layouts and begun assembly instructions of some of the simpler sub-units.

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SHE stopped abruptly with only a word that she would resume in the morning. George guessed at the deep fatigue that must have overtaken her in that long day of concentration.

It seemed hopeless to try to absorb that mass of material and build the intricate machine in so short a time. The one ray of hope lay in the assemoly instructions which she had begun. They were in a form simple enough for Jack and Marvin to handle.

He bought a gross of caffeine pills at an all-night drug store on his way to work the next morning. It was five o'clock and he felt he'd need them to get through the day and the next and the one after that—

By the time the juniors had arrived he had a day's work laid out for them. He also managed to swipe a couple of girls from someone else who had run into a snag on his project. They could help with the wiring and soldering. He sent the shopwork down to Tom Johnson, model-shop foreman—along with a box of fifty-cent cigars.

At eight he was locked up and ready to go. He had rigged up a crude system of levers to hold the pen so that he could guide it with only a small motion of his arm.

The hands of the clock passed eight. The pen made nothing but a wobbly line. He grasped it and knocked the levers aside. Swiftly the point began to trace out words. And then he knew why he had been so utterly exhausted. It was more than the mere holding of the pen. Somehow, his own nervous system was serving to power it. Rena was providing the trigger impulse.

—think somehow Harkase has found out. He asked me about the pen today and what I thought you might be doing with it. What it means I don't know. I'm just tired and scared, darling. If I could only know that you are there for certain.

But I mustn't waste time. I should be able to finish the instructions today. Then I will repeat everything once more. But even if you've got it all the first time there will be only five days—

She plunged again into the description of the alternator, George's sense of time seemed to go blind. He was a mere robot through which the message passed.

She finished—at two o'clock the next morning. Her last words were barely legible, as if she were working in the last stages of exhaustion.

George had fortified himself intermittently with caffeine pills but even so he felt as if he could not have continued another ten minutes. He glanced at his watch. An hour to get to his apartment. An hour back in the morning.

He went into the screen room and cleared off a section of table. He could put that two hours to better use.

He awoke again at five and made breakfast out of a couple of pills. His stomach felt as if it were slowly turning into one massive ulcer. His head seemed the volume of a number-three washtub. He could get breakfast in two or three hours when the cafeteria opened. In the meantime a lot of wiring could get soldered into place.

It was a ghastly-looking rig growing up there, he thought, as he plugged in the iron. None of the beautifully-laced jobs that the lab girls usually turned out. This was the granddaddy of all bull models.

But the rapidity with which it was going together was heartening. There was such utter clarity in Rena's instructions that the lowliest ham could have put the components together.

He tested the iron and leaned against the bench, checking over the last batch of instructions. Because of his fatigue when he wrote it most of it was wholly strange, as if written by another author and presented to him for the first time. He thumbed through the pages, mentally weighing his own thin sliver of genius against the massive intellect that seemed necessary to absorb that mass of material.

His eyes caught at a phrase.

—the mounting of the velac in the fixed field is extremely critical. The field must be measured accurately with a flux

meter and the exact plane of symmetry determined. The perpendicular axis of the velac channel—

It was like a sudden small explosion in his brain, he thought afterward. That name—*velac.*

Velac—it meant absolutely nothing. It resembled nothing that he had ever heard of before. In all her description Rena had used common terms for components—resistor, condenser, coil—values had been defined in familiar units. But velac—it was a word out of another language. A vague knot of fear congealed within his heart.

She had made an error.

In her vast experience in the ages of time she had forgotten what was available to him. Velac—a name out of the future, a device yet to be invented.

It occupied a place of central importance in the machine. Without it there would be no functioning of the alternator, he was certain. And no way to tell her he didn't know. No way to ask her how to build a velac—

The enormity of that error seemed to complete the numbing effect of lack of sleep. He sagged against the bench, watching the slow curl of vapor from the heated soldering iron.

CHAPTER VII

The Tryst

MECHANICALLY he took up the iron. There had to be some answer. Somewhere in that maze of instructional material there had to be a description of the velac. The name was just some contraction she used in reference to a common item or assembly of components. In the meantime he'd best get on with the rest of it.

But as he worked he knew it was no good. He knew that even though he had slipped past the word while writing it there was still no explanation. A single word—a single word to keep him from Rena forever.

Sykes surprised him at seven-thirty. The section chief walked up behind him as George bent over, half inside the temporary frame he had set up to hold the units.

"Since when did we go into the spaghetti business?" said Sykes. He viewed the mess with distaste.

George looked up, his face bleak and without humor. "Pretty, huh?"

"Is there anything in particular that it does?"

"Time machine," said George. "You know. Send guys into the future and that sort of stuff."

He swayed on his feet.

"George! What's wrong? You look sick, man."

George laid down the iron and wiped his forehead. "Got up too early, I guess. I'll be all right after I eat. Cafeteria isn't open yet, is it?"

"No, I don't think so. Look, I don't know why you've been knocking yourself out for the last couple or three days but you've got to cut it out. We want you to handle a new Army contract that's coming up. Some of the technical brass will be in next week to talk over the preliminaries.

"You've got to be in shape, man. There's competition in this business now. I don't mind your puttering around with this junk in off-periods but we've got to show a profit or get cut off at the pockets. We're only a lowly development lab, not one of those prima-donna research outfits."

"Yeah, I know all that," said George wearily. "I just haven't been feeling so hot since Rena pulled out. Too much of the bottle and not enough sleep, I guess. This mess here is just a notion I got. It'll only take a few more days to see if it's going to pan out into something or not. Most of the stuff is from the junk room. I'm not spending the dear old stockholders' hard earned cash on it."

"I think you ought to take the rest of the week off."

"You'd have to send the little men in white coats for me if I did. I'm better off right here."

"Have it your way but get some breakfast into you. You look like a zombie this morning."

After breakfast he set Jack and Marvin to the assembly job. He went down to the model shop to try to hurry up the stuff there. Then he came back and checked to see if Rena were contacting him again.

She was repeating the same material that he had already received. Though he had it he wanted to stay there, watching the pen record her thoughts. It was the closest contact with her that he would ever know—and there were so few hours of it left.

But the blind hope that somehow there would be an answer to the problem of the missing element kept him going. He laid down the pen, and turned to the pages he had already written. He passed up the math and started through the text, trying to absorb its content and find an explanation of velac.

There was none. She simply referred to the procurement of the velac as if it were a stock item he could pick off the shelves.

What if she had missed by a mere ten years, he thought. Could he hope to wait out the development of the velac, whatever it might be, and go to her when it turned up?

But it might as easily be fifty years. That would not be a large error in the great span of time that separated them. It would be easy for her to make an error of half a century.

When it came time for her to repeat the reference to the velac he wrote down her words again but there was no clarification.

The remaining four days passed as if in a single blur. For George there was scarcely any dividing line between them. On two more nights he slept in the lab without anyone knowing it. On two others, however, he had to go to his apartment for a few hours of rest.

IT WAS Saturday night—the end of the week Rena had given. George sat alone beside the mass of haywired equipment that he had tested and checked as best he could. In some near-miraculous manner it had been thrown together. The circuits checked—all but those involving the velac.

He sat staring bitterly at the unfinished machine. The pen was in his hand but it hadn't begun to write. Rena had promised to contact him at seven-thirty, just a half hour before her time of departure in her age.

He watched the sweep second hand of the clock swing slowly around. Precisely on time the pen point began dancing in swift whorls.

Hello, darling. Are you all ready to go? Check the calibrations very carefully once again, both temporal and spatial. I want to arrive in Cell Four and find you right there beside me. Oh, it's going to be so wonderful to see you again! It seems as if ten thousand years have passed in the last week.

I'm so tired and I know you must be too. Do you know what I think we're going to find? I think it will be a lovely world where men have conquered everything, including themselves. Where there won't be anything to make us unhappy again.

I think we'll arrive on a little hill overlooking a lovely town. It will be night there and there will be a slow warm rain. I love to walk in the rain but it will be dismal without you—

George, I'm afraid. What if you aren't there. You don't know what's it's been like, trying to reach you all this week, hoping you'd be reading my words, never knowing for sure.

I keep thinking, what if you can't build the alternator for some reason? I tried to make the instructions as simple as I could and specify materials you could obtain in your time. But I keep wondering, what if there's just one question you need to ask?

I'll have to stop this. In just a few minutes now I won't have to worry and wonder any more, will I? I'm at the University now. I'm going through the alternator in the Historical Lab here. My parents are here to say goodbye and Harkase seems as pleased as a fat hog. Sometimes I hate him. I think he's been

able to see something that none of the rest of us have.

There's time for no more now. The field is coming up. I'm walking towards it. So this is goodbye and—hello, darling!

HE waited. There was no more. The pen was still. She was gone—utterly beyond his reach. He dropped his head to the table and he could not hold back the tears.

After a time he tried the pen again to see if perhaps Rena were trying to reach him from Cell Four. If she were it was in vain. The pen remained a dead thing in his hand, silent and decaying. Somehow he knew it would never write again.

He fled from the laboratory and out of the building. He felt that he had to keep his body in physical motion to retain sanity.

The now widened gap of thirty-two hundred years seemed more terrible than ever. He thought of Rena, stepping into the field, hopeful of meeting him on the other side. What was she doing now?

She knew that he had failed. Her agony would be as great as his and she would be in a strange world that might be far different from the dream world she had hoped for. It might be a fierce and savage place where men and beasts would give her little chance for survival.

In vain he tried to comprehend the philosophy of her time which would allow her to take such risks with little concern for her life but which would deny her any right to be with George, regardless of her happiness. There was savagery in her age too.

He walked for endless miles, it seemed. At last it began to rain, slowly and gently. "I love to walk in the rain but it would be dismal without you—"

He headed for the nearest package store and reached it just at closing time.

For three days he was on a solid drunk. Sykes finally came for him on the next Wednesday.

"I suppose you had to do it sooner or later," said the section chief. "But I hope it's not going to be a permanent state. Let's get you into the shower and after you absorb a gallon of coffee we'll take a walk around the block."

"It's no good," said George. "You'd better get one of the other guys to engineer that new contract. I'll be lucky if I can hold a job in a repair shop."

"Yeah? Listen, you dope, they've tracked Rena as far as Detroit. I got a report this morning. She was positively identified there on Monday. I'll admit you don't find a girl like her more than once in a lifetime but you've had your binge now and it's time to pick up the pieces and get ready to see Rena when they catch up with her."

"Yeah—yeah, sure. I wouldn't want her to see me like this, would I?"

"Of course you wouldn't. Now you're talking sense."

It was almost a relief to get back to work the next day. Work and time would dim grief and make it bearable.

AS usual dealings with the military started out with a snarled-up mess in which the technical brass considered it possible to order engineering impossibilities with the same ease they could command a private to polish a general's buttons.

Their stupidity was refreshing as he let them back themselves into one corner after another. It would be quite a number of days before there would be agreement on preliminary specs, he saw.

After the conference he wiped up a few change orders on his last project and two others in current production. He almost had a phobia about going into the screen room where the unfinished alternator was. But he couldn't quite bring himself to order Jack and Marvin to dismantle it.

It was Saturday and he went in just before one o'clock quitting time. His feelings seemed dulled now by the events of the past week. He could almost view the machine dispassionately as a mere technical achievement, not as a broken key to reunion with Rena.

He sat down over the papers that he had written with her pen. He thumbed through them. Much of the math still

eluded him but he began a leisurely examination that replaced the panicky haste which had possessed him before.

Here were the basic principles of the machine. Why couldn't he work it out from there? Why wasn't it possible for him to design his own alternator and velac if necessary?

If he could do it, would it still be possible to arrive in Four simultaneously with Rena, eliminating the probability of her arriving without him?

He glanced speculatively at the machine and turned back to the pages of math. Was it worth a try? He smiled to himself. He would be trying all the remaining days of his life. For him there would be nothing else worth doing.

He began working his way slowly through the equations again, following the theory and transformation step by step. And then, after five and a half hours, forty pages deep in the pile, he found it.

Rena used the term, *velocity acceleration of hyperbolic stream flow.*

Velocity acceleration—*velac.*

The kind of term that would come into common use after technicians had been working with a device for a while. But how far in the future would it be?

Swiftly, he went on through the equations describing the phenomenon. It seemed suddenly as if a cold blast descended upon him. He read through the math again.

He knew those equations. They were descriptive of the electron flow within the tempora tube that he and Carl had made.

The tempora tube was the velac—with modifications.

Rena had erred by mere months perhaps, even weeks. She had known that he had helped develop it. No wonder there had been no explanation. But she had forgotten that the contraction, velac, had not yet been coined.

In his previous haste and intense fatigue he had defeated himself by passing over those equations without recognizing them. He swore futilely. If Rena had been harmed or lost to him because of his own thick headedness—

He went to the screen room where Carl worked and broke open the cabinet that held the existing models of the tempora-velac. He took them back to his own room and returned to the math.

There would have to be minor alterations. They were not developed closely enough to the form in which Rena knew them. He contemplated the two-foot globe with its complex innards. It would mean opening the bottle and resealing it.

The company boasted a television tube lab but it was ill-suited to anything else and George was even less suited as a glass technician.

He computed the alterations required in the elements and built a tiny grid assembly that would have to be added. He took the tubes to the other lab.

Carefully he heated one and broke the seal. Then he removed the largest terminal seal that contained a single high-voltage lead. It left a hole three inches in diameter. Deftly, he worked through it to alter the elements and insert the additional grid. His fingers felt clumsy and thick. He wondered if he could ever depend on the operation of the tube when he was through.

Finally the terminal seal was replaced and the vacuum line joined. It seemed an endless wait while the mercury pump scavenged the thinning molecules of air.

Then he flashed it—and a clear thin line appeared almost all the way around the tube.

He glanced wearily out the window. It was almost daylight—Sunday. No one would be down. He could try again with the other tube but he felt the exhaustion creeping up on him again and he remembered the other blunder that fatigue had cost.

Still he couldn't give up a whole day with possible success this close. If the next tube were a failure he could get the lab to make another on Monday.

He returned to the work. He let the glass anneal for hours after he finished the alterations. This time there was no cracking.

The sun was setting when he took the finished tube back to his own lab. He

clamped the tempora-velac in place and adjusted the orifice as Rena had directed. Twenty-four hours after he had first recognized the velac equations the alternator was ready for the application of power.

HE was ready to go—eight days late. Would it make a difference? Could he still join Rena at that moment when she passed into Cell Four? She had given him exact coordinate settings for the machine with warning not to alter them in any way. It was possible that other factors of which he was ignorant were involved. He didn't know but he carefully adjusted the time setting to eight days less.

It was anti-climatic now. A week ago he had been keyed to intolerable pitch when failure had come. Now Rena's written thoughts seemed like ghostly memories out of an irretrievable past. He looked about the lab where he had worked for eight years. He wondered what they'd think when he disappeared.

The alternator was set for self destruction. They could never follow. The pen was in his pocket and Rena's papers had been carefully burned in a wastebasket. There would be no evidence he had left as far as he knew—unless it were his own body found dead in an alternator that was a failure.

The gray field was rising now. It pressed like gelatin fingers against the space beyond its confining plates. He glanced at the clock. It was ten minutes after eight.

He walked into the grayness.

* * * * *

He was standing on a low hill and there was a city not far away just as she had said. It was even raining and the lights glistened in the slowly falling shower. And then he heard her step, saw her moving in the shadows.

"Rena!"

"George—oh, *George,* darling!"

He pressed her close in his arms and when he kissed her face he tasted her tears mingled with the rain.

"I've been waiting," she said. "I was sure I'd failed and you weren't coming."

He tried to see his watch. "Ten minutes. Ten minutes isn't bad—out of thirty-two hundred years."

"I know. But it seemed so long when I thought I would never see you again. I've found out about these cells. There's no going back through them—only forward—even for us. I could never have gone back to try to reach you again."

She shivered, half with cold and half with the thought of the awful impenetrable gulf that might have separated them at this moment if they had failed.

"It's just as you dreamed it would be," he said. "But you're cold. Let's go down to the city and find out what kind of a world we've come into. Maybe even the people are as you dreamed of them."

They moved down the muddy slope towards the town.

* * * * *

Not far away in space but six centuries back in time, Dr. Papes Harkase sat in weary relief before his instruments in the Historical Laboratory. The others had gone. It had been an hour since Rena had left. He had spent that time in desperate urgent probing with his instruments.

They told a story of success and the relief that followed laid bare the incredible exhaustion that had crept upon him the past months. He had brought to fruitful conclusion the project that had occupied nearly all his professional life.

In it all there was only one deep regret. He remembered the face of Rena that day when George had been sent back to his own time and blocked. He remembered how she had looked when she said, "You were all in on it, weren't you?"

He wished he could have explained just why *he* had been in on it. He wished he could have spared her some of the agony of that terrible week when she never knew that her thoughts were being received.

Well, it had been pretty terrible for him too, he thought. He had had to take dangerous steps—impressing Rena to take her pen and leave it with George.

He had not known for certain that her thoughts could reach the pen through the block. It had been a well-indicated theory—but only a theory.

He picked up the sheaf of papers on the desk. He wished that he might have shown them to her, for they explaineo why he had taken advantage of Cramer's fanatical attitude and helped send George back, to be blocked forever unless he could come through to Cell Four by his own devices.

For that had been the requirement laid down by the immutable mathematical laws that defined the only circumstances under which their blind branch could ever be regrafted to the main stem of history, which they had left so long ago.

He laid the sheets down and patted them with finality. Rena could not have been told what was in them. Her knowing would in itself have broken the laws by which the regrafting could be performed. And so he had manipulated the situation according to the requirements of those merciless equations and with all his skill as Master Historian.

But the price of his success was Rena's eternal hatred and, though he would never see her again, he wished that it didn't have to be so.

He rose and shut down the massive panel of instruments. It was done. No longer was Cell Four like a blind bud on the end of a probability branch six hundred years ahead. Rena and George had reached the Cell together and now the tenuous fiber of possibility that had reached tentatively back to the main stream was a strong bridge, an indestructible link.

A chain of men whose names were Brooks.

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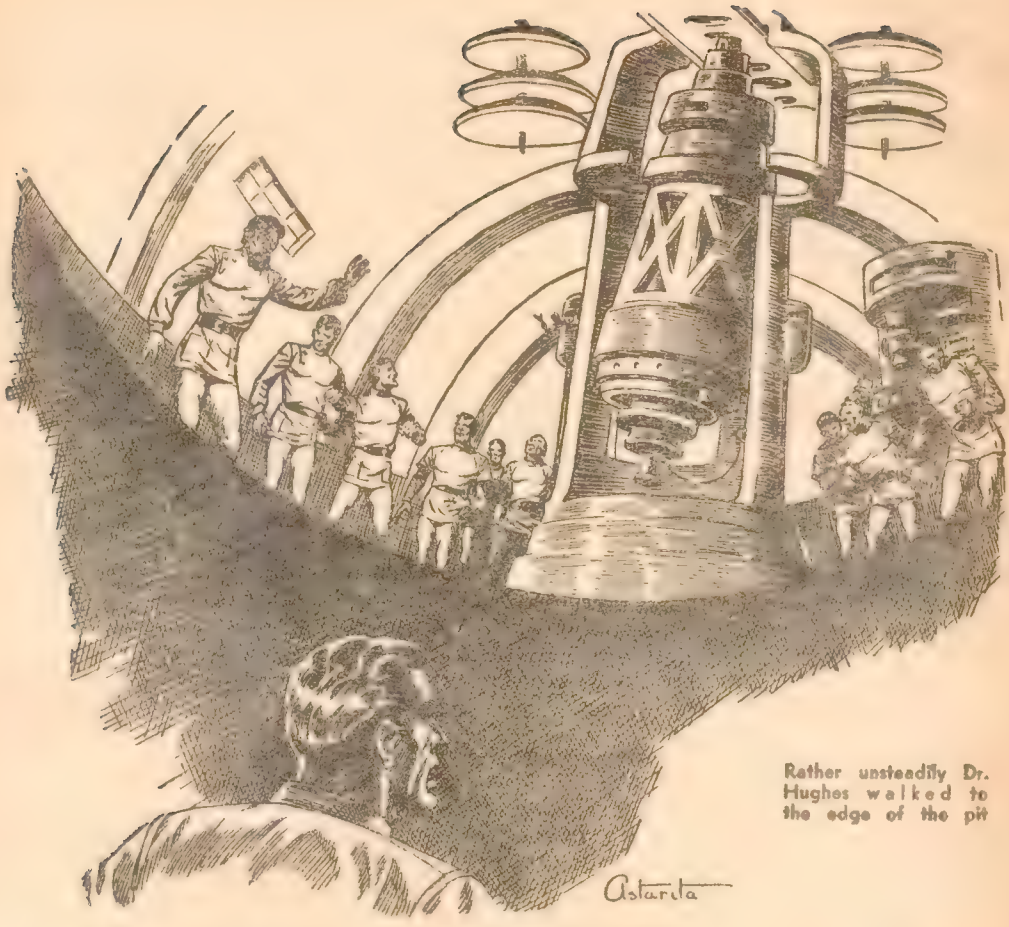
AS YOU WERE

By HENRY KUTTNER

FEATURED NEXT ISSUE!



Rather unsteadily Dr. Hughes walked to the edge of the pit

The REVERSED Man

By ARTHUR C. CLARKE

IT WAS one of those accidents for which no one could be blamed. Richard Nelson had been in and out of the generator pit a dozen times, taking temperature readings to make sure that the liquefied helium, chilled to sub-zero temperatures, was not seeping through the insulation. This was the first generator in the world to use the principle of super-conductivity.

Nelson noted with satisfaction that the temperature had not fallen further than expected. The insulation was doing its work and it would be safe to lower the rotor into the pit. He put away his notebook and started to walk

When an industrial accident sends Dick Nelson into the Fifth Dimension, a huge corporation is driven close to bankruptcy!

towards the ladder. At the center of the pit he kept his appointment with Destiny.

The load on the power network had been steadily increasing since twilight arrived. As the last rays of sunlight faded miles of mercury arc lights along the great highways sprang into life, millions of fluorescent tubes began to glow in the cities, housewives switched on their cookers to prepare the evening meal.

These were the normal loads. But on a mountain three hundred miles to the south, a giant cosmic-ray analyzer was thrown on in a test run by astronomers. The electrical consumption of its five-thousand-ton heating units was enormous.

The meters in the power station took a tremendous jump and the engineer on duty ordered the stand-by generators into action. He wished Dr. Hughes' big new generator could also be started.

Half an hour later the Meteorological Bureau put out a general frost warning over the radio. Within sixty seconds more than a million electric fires were switched on. The meters passed the danger mark.

With a tremendous crash three giant circuit breakers leaped from their contacts but the fourth breaker failed to clear. Great copper bars glowed cherry-red. The acrid smell of burning insulation filled the air and molten metal dripped heavily on the floor beneath, welding themselves across the lines that led to the new generator.

Forces greater than any yet produced by man rose to peak intensity in an immense surge of power that lasted several seconds.

At that instant Nelson reached the center of the pit.

When the emergency lights came on again Nelson's assistant ran to the lip of the rotor pit. He didn't know what had happened, except that it was mighty serious. Nelson, fifty feet down, must have got a big scare.

"Hello, Dick!" he shouted. "Hurry up! Let's see what the trouble is!"

There was no reply. He leaned over the edge of the great pit and peered into the gloom. The light was now very poor and that made it difficult to see what was below. At first it seemed that the pit was empty but that was ridiculous! He called again.

"Hello! You all right, Dick?"

Again no reply. Worried now, the assistant began to descend the ladder. He was halfway down when a curious noise, like a toy balloon bursting very far away, made him look over his shoulder. Then he saw Nelson lying at the center of the pit on the temporary woodwork covering the turbine shaft. Nelson was very still, and there seemed something altogether wrong about the angle at which he was lying.

RALPH HUGHES, chief physicist, looked up from his littered desk as the door opened. Things were slowly returning to normal after the night's disasters. Fortunately the new generator was unharmed. He was glad he was not the chief engineer. Murdock would still be snowed under by paper work. The thought gave Dr. Hughes considerable satisfaction.

"Hello, Doc," he greeted his visitor. "How's your patient getting on?"

Doctor Sanderson nodded briefly. "He'll be out of hospital in a day or so. But I want to talk to you about him."

"I don't know the fellow—I seldom go near the power plant. After all, Murdock's paid to run the place."

Sanderson smiled wryly. There was little love lost between the chief engineer and the brilliant young physicist.

"I think this is up your street, Ralph. At any rate it's beyond me. You've heard what happened to Nelson?"

"He was inside my new generator when the power was shot into it, wasn't he?"

"That's correct. His assistant found him suffering from shock when the power was cut off."

"What kind of shock? It couldn't have been electric, because of the insulation. In any case, I gather that he was in the center of the pit when they found him."

"That's quite true. We don't know what happened. But he's now come round and seems none the worse—apart from one thing." The doctor hesitated for a moment, then went on.

"Today, when I got to the ward, he was sitting up in bed looking at a newspaper with a very puzzled expression. I asked him what was the matter. He answered, 'Something's happened to me, Doc.' He picked up the paper he had been looking at and pointed to it. 'I

can't read any more,' he said.

"I diagnosed amnesia. Nelson must have read my expression, for he said quickly: 'Oh, I still know the letters and words, but they're the *wrong way round*. I think something must have happened to my eyes.' He held up the paper again. 'This looks exactly as if I'm seeing it in a mirror. Would you get me a looking glass? I want to try something.'

"I did. He held the paper to the glass and started to read aloud at normal speed. But that's a trick anyone can learn—compositors have to do it with type—and I wasn't impressed. On the other hand I couldn't see why an intelligent fellow like Nelson should put on an act like that. So I finally decided the shock must have given his mind a bit of a twist."

DR. SANDERSON grinned and continued his story.

"I was getting up to leave when Nelson said, 'Oh, I almost forgot. I think I must have fallen on my right arm. The wrist feels badly sprained.' 'Let's look at it,' I said, bending to pick it up. 'No, the other arm,' Nelson said and held up his *left* wrist. Still humoring him, I answered, 'Have it your own way. But you said your right one, didn't you?'

"Nelson looked puzzled. 'So what?' he replied. 'This is my right arm. My eyes may be queer, but there's no argument about that. Here's my wedding ring to prove it. I've not been able to get the darned thing off for five years.'

"That shook me rather badly. Because, you see, it was his left arm he was holding up, and his left hand that had the ring on it. I could see that what he said was quite true. The ring would have to be cut to get it off again.

"So I said, 'Have you any dental fillings?' "

" 'Yes, one or two.' "

"As we sat looking at each other, I had a bright idea. I asked Nelson if I could see the things he had been carrying in his pockets. Here they are."

Dr. Sanderson produced a handful of coins and a small, leather-bound diary. Hughes recognized the latter at once as an Electrical Engineer's Diary —he had one in his own pocket. He took it from the doctor's hand and flicked it open at random.

AND then, to Ralph Hughes, it seemed that the foundations of his world were giving way!

For he could not read one word of Nelson's diary. Both the print and the handwriting were *inverted* as if seen in a mirror.

Dr. Hughes got up from his chair and walked rapidly around the room several times. Then he turned to Dr. Sanderson again.

"You expect me to believe that Nelson has been actually inverted in some way, so that his right and left sides have been interchanged?"

"I don't expect you to believe anything. I'm merely giving you the evidence. If you can draw any other conclusion I'd be delighted to hear it. I might add that I've checked Nelson's teeth. All the stoppings have been transposed. Explain *that* away if you can. These coins are rather interesting, too."

Hughes picked them up. They included a quarter, one of the beautiful new fifty-cent pieces and a few dimes and pennies. He would have accepted them as change without hesitation. Being no more observant than the next man he might never have noticed which way the eagle looked. But the lettering —Hughes could picture the consternation of the U. S. Mint if these curious coins ever came to its notice. Like the diary they too had been laterally inverted.

Dr. Sanderson's voice broke into his reverie.

"I've told Nelson not to say anything about this. I'm going to write a full report. But what we want to know is *how* this happened. As you are the designer of the new machine I've come to you for advice."

Dr. Hughes did not seem to hear him. He was sitting at his desk with his hands outspread, his little fingers touching. For the first time in his life he was thinking seriously about the difference between left and right

Dr. Sanderson did not release Nelson from hospital for several days. He was studying his peculiar patient and collecting material for his report. So far as he could tell Nelson was normal, apart from his inversion. He was learning to read again, and his progress was swift after the initial strangeness had worn off. He would probably never again use tools in the same way that

he had done before the accident. For the rest of his life the world would think him left-handed. However, that would not handicap him in any way.

Dr. Sanderson had ceased to speculate about the cause of Nelson's condition. He knew very little about electricity—that was Hughes' job. He was quite confident that the physicist would produce the answer in due course—he had always done so before. The Company was not a philanthropic institution and it had good reason for retaining Hughes' services.

The new generator, which would be running in a week, was Hughes' brain child.

But Dr. Hughes himself was less confident about Nelson's experience. The magnitude of the implications were terrifying. For he realized, as Sanderson had not, that it involved utterly new regions of science. He knew that there was only one way in which an object could be transformed into its own mirror image. But how could so fantastic a theory be proved?

He had collected all the available information on the circuit that had energized the great armature. Calculations had given an estimate of the currents that had flowed through the coils for the few seconds they had been conducting.

But the figures were largely guesswork. He wished he could repeat the experiment to obtain accurate data. It would be amusing to see Murdock's face if he said, "Mind if I throw a perfect short across generators One to Ten sometime this evening?" *That* was definitely out.

It was lucky he still had the working model. Tests on it had given some idea of the fields produced at the generator's center but their magnitudes were a matter of conjecture. They must have been enormous—it was a miracle that the windings had stayed in their slots.

For nearly a month Hughes struggled with his calculations and wandered through regions of atomic physics he had carefully avoided since he left the university. Slowly the complete theory began to evolve in his mind. He was a long way from the final proof but the road was clear. In another month he would have finished.

The great generator itself, which had dominated his thoughts for the last year, now seemed trivial and unimportant. He scarcely bothered to acknowledge the congratulations of his colleagues when it passed its final tests and began to feed its millions of kilowatts into the system.

A fortnight later Dr. Sanderson came to see him again. He was in a grave mood.

"Nelson's back in hospital," he announced. "I was wrong when I said he'd be okay."

"What's the matter with him?" asked Hughes in surprise.

"He's starving to death."

"Starving! What on earth do you mean?"

Dr. Sanderson pulled a chair up to Hughes' desk and sat down.

"I haven't bothered you for the past few weeks," he began, "because I knew you were pretty busy on your own theories. I've been watching Nelson carefully and writing up my report. At first, as I told you, he seemed perfectly normal.

"Then I noticed that he was losing weight. It was some time before I was certain of it. He started to complain of weakness and lack of concentration. He had all the signs of vitamin deficiency. I gave him vitamin concentrates, but they haven't done any good. So I've come to have another talk with you."

Hughes looked baffled, then annoyed.

"But, hang it all—you're the doctor!"

"Yes, but this theory of mine needs some support. I'm only an unknown medico—no one would listen to me until it was too late. For Nelson is dying, and I think I know why."

WILLIAM ROBERT had been stubborn at first but Dr. Hughes had had his way. The members of the Board of Directors were even now filing into the conference room for the extraordinary general meeting that had just been called. Their perplexity was still further increased when they heard that Hughes was going to address them. They all knew the physicist and his reputation—but he was a scientist and they were businessmen. What was Mr. Robert planning?

Dr. Hughes, the cause of all the trouble, felt annoyed with himself for being nervous. His opinion of the Board of Directors was not flattering and there was certainly no reason for stage

fright. It was true that they might consider him mad but his past record would take care of that. Mad or not he was worth thousands to them.

Dr. Sanderson smiled encouragingly at him as he walked into the conference room. Mr. Robert had just finished speaking. He picked up his glasses.

"Well, here is Doctor Hughes, gentlemen. He will—ahem—explain everything to you."

Slowly at first, then with more confidence as he gained the attention of his audience, the physicist began to tell his story. Nelson's diary drew gasps of amazement from the Board and the inverted coins proved fascinating curios. Hughes was relieved to see that he had fully aroused the interest of his listeners. He took a deep breath and made the plunge he had been fearing.

"You have heard what has happened to Nelson, gentlemen, but what I am going to tell you is even more startling. I must ask for your very close attention."

He picked up a rectangular sheet of paper from the conference table, folded it carefully along a diagonal and tore it along the fold.

"Here we have two right-angled triangles with equal sides. I lay them on the table—so." He placed the paper triangles side by side on the table, with their hypotenuses touching so that they formed a kite-shaped figure. "Now, as I have arranged them, each triangle is the mirror image of the other. You can imagine that the plane of the mirror is along the hypotenuse.

"This is the point I want you to notice. As long as I keep the triangles in the plane of the table, I can slide them about as much as I like but I can never place one so that it exactly covers the other. Like a pair of gloves they are not interchangeable, though their dimensions are identical."

He paused to let that sink in. There were no comments, so he continued.

"Now, if I pick up one of the triangles, turn it over in the air and put it down again on the table, the two are no longer mirror images but have become completely identical—so." He suited the action to the words.

"This may seem very elementary—in fact, it is. But it teaches us one very important lesson. The triangles on the table were flat objects, restricted to two dimensions. To turn one into its mirror image I had to lift it up and rotate it in the third dimension. Do you see what I am driving at?"

He glanced round the table. One or two of the directors nodded slowly in dawning comprehension.

"Similarly to change a solid, three-dimensional body, such as a man, into its analogue or mirror image it must be rotated in a *fourth* dimension. I repeat—a fourth dimension."

There was a strained silence. Someone coughed but it was a nervous not a sceptical cough.

"Four-dimensional geometry, as you know"—he'd be surprised if they did—"has been one of the major tools of mathematics since before the time of Einstein. But until now it has always been a mathematical fiction, having no real existence in the physical world.

"It now appears that the unheard-of currents, amounting to millions of amperes, which flowed momentarily in the windings of our generator, must have produced a certain *extension* into four dimensions for a fraction of a second and in a volume large enough to contain a man.

"I have been making some calculations and have satisfied myself that a 'hyperspace' about ten feet on a side was, in fact, generated—a matter of some ten thousand quartic, not cubic, feet. Nelson was occupying that space. The sudden collapse of the field when the circuit was broken caused the rotation of the space and Nelson was inverted.

"I must ask you to accept this theory, as no other explanation fits the facts. I have the mathematics here if you wish to consult them."

HE WAVED the sheets of paper in front of his audience, so that the directors could see the imposing array of equations. The technique worked—it always did. They cowered visibly. Only McPherson, the secretary, was made of sterner stuff. He had had a semi-technical education.

"You say that Nelson has been rotated in the Fourth Dimension—but I thought Einstein has shown that the Fourth Dimension was time."

Hughes groaned inwardly. He had been afraid of this red herring.

"I was referring to an additional

dimension of *space*," he explained patiently. "By that I mean a dimension or direction at right-angles to our normal three. One can call it *the* Fourth Dimension if one wishes. With certain reservations time may also be regarded as a dimension.

"As we normally regard space as three-dimensional it is then customary to call time the Fourth Dimension. But the label is arbitrary. As I'm asking you to grant me four dimensions of space we must call time the *Fifth* Dimension."

"Five dimensions!" exploded someone further down the table. "Good heavens!"

Dr. Hughes could not resist the opportunity. "Space of several *million* dimensions has been frequently postulated in sub-atomic physics," he said quietly.

There was a stunned silence. No one, not even McPherson, seemed inclined to argue.

"I now come to the second part of my account," continued Dr. Hughes. "A few weeks after his inversion we found that there was something wrong with Nelson. He was taking food normally but it didn't seem to nourish him properly. The explanation has been given by Dr. Sanderson and leads us into realms of organic chemistry. "I'm sorry to be talking like a text-book but you will soon realize how vitally important all this is to the Company. And you will also have the satisfaction of knowing that we are now all on equally unfamiliar territory."

That was not quite true, for Hughes still remembered fragments of his chemistry. But it might encourage the stragglers.

"Organic compounds are composed of atoms of carbon, oxygen and hydrogen, with other elements, arranged in complicated ways in space. Chemists are fond of making models of them out of knitting needles and coloured plasticene. The results are often very pretty and look like works of advanced art.

"Now, it is possible to have two organic compounds containing identical numbers of atoms, arranged in such a way that one is the mirror image of the other. They're called stereo-isomers and are very common among the sugars. If you could set their molecules side by side, you would see that they bore the same sort of relationship as a left and a right glove. They are in fact called right or left-handed—dextro or laevo—compounds. I hope this is quite clear."

Dr. Hughes looked round anxiously. Apparently it was.

"Stereo-isomers have almost identical chemical properties," he went on, "though there are subtle differences. In the last few years, Dr. Sanderson tells me, it has been found that certain essential foods, including the new types of vitamins recently discovered by Professor Vandenburg, have properties depending on the arrangement of the atoms in space.

"In other words, gentlemen, the left-handed compound might be essential for life but the right-handed one would be of no value. This in spite of the fact that their chemical compositions are identical.

"You will appreciate now why Nelson's inversion is much more serious than we at first thought. It's not merely a matter of teaching him to read again, in which case—apart from its philosophical interest—the whole business would be trivial. He is actually starving to death in the midst of plenty, simply because he can no more assimilate certain molecules of food than we can put our right foot into a left boot.

"Dr. Sanderson has tried an experiment which has proved the truth of this theory. With very great difficulty, he has obtained the stereo-isomers of some of these vitamins. Professor Vandenburg himself synthesized them when he heard of our trouble. They have already produced a marked improvement in Nelson's condition."

Hughes paused and drew out some papers. He thought he would give the Board time for the shock. If a man's life were not at stake the situation would have been amusing. The Board was going to be hit where it would hurt most.

"As you will realize, gentlemen, since Nelson was injured—if you can call it that—while he was on duty, the Company is liable to pay for any treatment he may require. We have found that treatment and you may wonder why I have taken so much of your time telling you about it.

"The reason is very simple. The production of the necessary isomers is almost as difficult as the extraction of radium—more so, in some cases. Dr.

Sanderson tells me that it will cost at least twenty-five thousand dollars *a day* to keep Nelson alive."

The silence lasted for a full minute. Then everyone started to talk at once. Mr. Robert pounded on the table and presently order was restored. The council of war had begun.

THREE hours later, an exhausted Hughes left the conference room and went in search of Dr. Sanderson, whom he found fretting in his office.

"Well, what's the decision?"

"What I was afraid of. They want me to re-invert Nelson."

"Can you do it?"

"Frankly, I don't know. All I can hope to do is to reproduce the conditions of the original fault as accurately as I can."

"Weren't there any other suggestions?"

"Quite a few but most of them were stupid. McPherson had the best idea. He wanted to use the generator to invert normal food so that Nelson could eat it. I had to point out that to take the big machine out of action for this purpose would cost millions a year and in any case the windings wouldn't stand it more than a few times. So that scheme collapsed.

"Then Mr. William Robert wanted to know if you could guarantee there were no more vitamins we'd overlooked or that might still be discovered. His idea was that in spite of our synthetic diets we might not be able to keep Nelson alive after all."

"What did you say to that??"

"I had to admit it was a possibility. So Mr. Robert is going to have a talk with Nelson. He hopes to persuade him to risk it—his family will be taken care of if the experiment fails."

Neither of the two men said anything for a few minutes. Then Dr. Sanderson broke the silence.

"Now you understand the sort of decision a surgeon often has to make," he said.

Hughes nodded in agreement. "It's a beautiful dilemma, isn't it? A perfectly healthy man—but it will cost ten million dollars a year to keep him alive and we can't even be sure of that. I know the Board's thinking of its precious balance sheet more than anything else but I don't see any alternative. Nelson will have to take a chance"

"Couldn't you make some tests first?"

"Impossible. It's a major engineering operation to get the rotor out. We'll have to rush the experiment through when the load on the system is at minimum. Then we'll slam the rotor back and tidy up the mess our artificial short has made. All this will have to be done before the peak loads come on again. Poor old Murdock's mad as a hornet about it."

"I don't blame him. When will the experiment start?"

"Not for a few days at least. Even if Nelson agrees I've got to fix up all my gear."

No one ever knew what Mr. Robert said to Nelson during the hours they were together. Dr. Hughes was more than half prepared for it when the telephone rang and the Old Man's tired voice said, "Hughes? Get your equipment ready. I've spoken to Murdock, and we've fixed the time for Thursday night. Can you manage by then?"

"Yes, Mr. Robert."

"Good. Give me a progress report every day till then. That's all."

Thursday night, the enormous room was dominated by the great cylinder of the rotor, hanging thirty feet above the gleaming plastic floor. A little group of men stood silently at the edge of the shadowed pit, waiting patiently. A maze of temporary wiring ran to Dr. Hughes' equipment—the special relays that had been constructed to make the circuit at the calculated instant.

That was the greatest problem of all. Dr. Hughes had no way of telling when the circuit should be closed—whether it should be when the voltage was at maximum, when it was at zero or at some intermediate point on the sine wave. He had chosen the simplest and safest course. The circuit would be made at zero voltage. When it opened again would depend on the speed of the breakers.

In ten minutes the last of the great factories in the service area would be closing down for the night. The weather forecast had been favorable—there would be no abnormal loads before morning. By then the generator would be running again. Fortunately the method of construction made it easy to reassemble the machine but it would

be a very close thing and there was no time to lose.

When Nelson came in, accompanied by Mr. Robert and Dr. Sanderson, he was very pale. He might, thought Dr. Hughes, have been going to his execution. The thought was somewhat ill-timed and he put it hastily aside.

There was just time for a last quite unnecessary check of the equipment. He had barely finished when he heard Mr. Robert's quiet voice.

"We're ready, Dr. Hughes."

RATHER unsteadily Dr. Hughes walked to the edge of the pit. Nelson had already descended and, as he had been instructed, was standing at its exact center, his upturned face a white blob in the shadows. Dr. Hughes waved a brief encouragement and turned away to rejoin the group by his equipment.

He flicked over the switch of the oscilloscope and played with the synchronizing controls until a single cycle of the main wave was stationary on the screen. Then he adjusted the phasing—two brilliant spots of light moved towards each other along the wave until they coalesced at its geometric center. He looked briefly at Murdock, who was watching the megawattmeters intently. The engineer nodded. With a silent prayer, Hughes threw the switch.

There was the tiniest *click* from the relay unit. A fraction of a second later the whole building seemed to rock as the great conductors crashed over in the switch room two hundred feet away. The lights faded and almost died. Then it was all over. The circuit breakers, driven at almost the speed of an explosion, had cleared the line again. The lights returned to normal and the needles of the megawattmeters dropped back on to their scales.

The equipment had withstood the overload. But what of Nelson?

Dr. Hughes was surprised to see that Mr. Robert, for all of his sixty years, had already reached the generator. He was standing by the its edge, looking down into the great pit.

Slowly the physicist went to join him. He was afraid to hurry. A growing sense of premonition had filled his mind. Already he could picture Nelson lying in a twisted heap at the center of the well, his lifeless eyes staring up at them reproachfully.

Then came a still more horrible thought. Suppose the field had collapsed too soon, when the inversion was only partly completed? In another moment, he would know the worst.

There is no shock greater than that of the totally unexpected, for against it the mind has no chance to prepare its defenses. Dr. Hughes was ready for almost anything when he reached the generator. Almost, but not quite.

He did not expect to find it empty.

What came after that he could never perfectly remember. Murdock seemed to take charge then. There was a great flurry of activity as the engineers swarmed in to replace the giant rotor. Somewhere in the distance he heard Mr. Robert saying, over and over again. "We did our best—we did our best." He must have replied somehow but everything was very vague.

In the gray hours before the dawn, Dr. Hughes awoke from his fitful sleep. All night he had been haunted by his dreams, by weird fantasies of multi-dimensional geometry. There were visions of strange, other-worldly universes of insane shapes and intersecting planes along which he was doomed to struggle endlessly, fleeing from some nameless terror.

Nelson, he dreamed, was trapped in one of those unearthly dimensions and was trying to reach him. Sometimes he was Nelson himself and he imagined that he could see all around him the universe he knew, strangely distorted and barred from him by invisible walls.

The nightmare faded as he struggled up in bed. For a moment he sat holding his head while his mind began to clear. He knew what was happening. This was not the first time the solution of some baffling problem had come suddenly upon him in the night.

There was one piece still missing in the jigsaw puzzle that was sorting itself out in his mind. One piece only—and suddenly he had it. There was something that Nelson's assistant had said, when he was describing the original accident. It had seemed trivial at the time. Until now, Hughes had forgotten all about it.

"When I looked inside the generator there didn't seem to be anyone at all there, so I started to climb down the ladder . . ."

What a fool he had been! Old Mc-

Pherson had been right or partly right, after all!

The field had rotated Nelson in a fourth dimension of space but there had been a displacement in time as well. On the first occasion it had been a matter of seconds only. This time, the conditions must have been different in spite of all his care. There were so many unknown factors and the theory was more than half guesswork.

Nelson had not been inside the generator at the end of the experiment. But he would be.

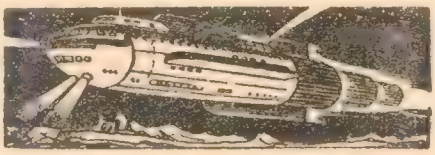
Dr. Hughes felt a cold sweat break out all over his body. He pictured that thousand-ton cylinder, spinning beneath the drive of its fifty million horsepower. Suppose something suddenly materialized in the space it already occupied?

He leaped out of bed and grabbed the private phone to the power station. There was no time to lose—the rotor would have to be removed at once. Murdock could argue later.

Very gently something caught the house by its foundations and rocked it to and fro, as a sleepy child may shake its rattle. Flakes of plaster came planing down from the ceiling. A network of cracks appeared as if by magic in the walls.

The lights flickered, became suddenly brilliant, faded out.

Dr. Hughes threw back the curtain and looked towards the mountains. The power station was invisible beyond the foothills of Mount Perrin but its site was clearly marked by the vast column of debris slowly rising against the bleak light of the dawn.



Wonder Oddities

WILL farmers of the future use atomic power? Many scientists believe the bombing on Nagasaki was responsible for stimulating the growth of vegetables on near-by farms, and diligent experiments are now being conducted to learn just what effects atomic radium has on vegetable life and whether it can be exploited agriculturally.

OUR horse and buggy business used to employ about 1,000,000 men in this country around 1905. Compare this to our present automobile industry, which at the last count employed more than 6,000,000 men plus over 1,000,000 in the oil production and distribution end.

NORTHWESTERN UNIVERSITY scientists reveal that the cost of commodities is indeed on the upward swing. The chemical contents of the human body, once worth but 98 cents for a full grown male standing about 5 feet 10 inches and weighing 170, are now worth all of $31.04.

DID you know that pepper is entirely without flavor? Like cinnamon, nutmeg, ginger, cloves, and other common spices, it is merely hot and rouses the heat pain nerves in our palates while its aroma stirs our other senses. The combined forces fool us into thinking that we are enjoying peculiar taste sensations.

EVEN though coal, which motivates so much of our equipment today, was known as far back as the days of the Roman republic, there was great reluctance toward its use. It was not regarded as a practical fuel by Americans until 1790. England began using coal about 1650, but with great distaste and only because her forests were almost depleted.

RAILROAD trains today shoot across the continent at speeds of 100 to 115 miles per hour, but the world's speed record for a fast railroad run was set in 1905 and has not thus far been equalled. On July 12, 1905, the Pennsylvania "Broadway Limited," known as "Old 7002," covered three miles in 85 seconds, attaining a speed of 127.06 miles.

NO HIDING PLACE

Jake Murchison, Helen Wall and their rollicking crew of space engineers have it out with Solar Salvage in their climactic quest for a herculium hoard lost in the void!

CHAPTER I

"Hold Everything!"

I BEGAN to get jittery when Pat and Cap were an hour overdue but Carroll just turned on that gentle smile and soothed me in that soft voice, so incongruous in a seven-foot giant with shoulders like mountains.

"Nothing can happen here, Jake," he said, just above a whisper. "There's not a thing on this planetoid except the Astrogation Center. And nobody knows we're here."

"We-ell, you've got a point. But if anything *could* happen here Space Salvage, Inc., would be the ones it would

"Go ahead of me, both of you," said Harry, as the Dolphin settled tail first about fifty feet away

a novelet by CLEVE CARTMILL

happen to—with our luck. They've been in that library three hours." I looked at the control-room chronometer. "And blast-off time is in forty-three minutes plus."

"They'll make it, don't worry."

Easy to say but the law of averages set me to pacing the control room floor, shooting anxious glances at the group of domed buildings forming the Astrogation Center. They looked sinister with their dark smooth exteriors, surrounded by bleak plains of rock and sand.

The law of averages predicted trouble afoot—we *always* had trouble. It wasn't intuition, it wasn't premonition. I took a strictly scientific attitude. The facts that my heart began to beat faster, my hands turned clammy and a sense of doom oppressed me, I told myself, was a result of cold appraisal, not fear.

I told myself this again—and I was still scared.

"I'm going to go find out," I said after another couple of miles of pacing.

"Cap'll be sore," Carroll warned. "You know what he said—if we divided up we'd keep each unit as strong as possible just in case."

"Yeah," I sighed, "I guess so. But I want to get going."

Carroll's spaniel eyes picked up a

twinkle. "So you can get back to Arcton City all the quicker?"

"And why not?"

"Don't get me wrong, Jake. You've got the prettiest red-headed reason I ever saw for getting back. Are you going to try to get your ticket then?"

"Hadn't thought of it."

"I mean, she outranks you. Might be kind of awkward."

"What are you getting at?"

Carroll grinned. "Well, I was just thinking of you saying, 'Captain Wall, begging your pardon, ma'am, but will you rustle me up a stack of hotcakes?' I'm just kidding, Jake, trying to get your mind off catastrophe."

FINE way to do it, I thought, bringing it up again after succeeding. I looked as the buildings again and shivered. Everything was so damned *bare!* If only there was a flower—just a little old blue flower—I'd have felt swell. I wouldn't even have asked for butterflies.

Helen. I wondered what she was doing. I looked at our screen and resisted the impulse to try to call her. I couldn't chance it. Nobody must know where we were. Oh, she knew, of course—but somebody else might cut in on the beam.

Captain Helen Wall, with twin comets on her snazzy uniform. I wondered how I'd look with twin comets. *"Captain Helen, I think you're swell." "Go on, Captain Jake"*—I could see the green eyes sparkle—*"I bet you tell that to every girl named Helen Wall."*

Silly, I thought. Mooning, when there was work to be done, a fortune to be won. Then I remembered things—and I got mad.

"Do you realize," I asked Carroll, "that we have been held up by a gang of thugs, namely Solar System Salvage Company, Limited, for lo these many moons?"

"Sure, Jake. But so what?"

"I am just beginning to get sore, that's what. And I'm going to do something about it. I wasn't mad when Solar impounded our cargo of herculium right after we took it off the *Astralot.** I didn't blow my top when we were served an injunction on Arcton, to keep us from raising that shuttle ship.☆ I held my temper when Oliver Clayborne insisted on going along when we had to intercept that ship full of dead people.♣ But now—"

"But now," Carroll cut in smoothly, "you've got the jitters and you're trying to blame everything on Solar. I can't say that I blame you for feeling that way but we had a fine break in Arcton City, Jake."

"Oh, yeah?"

"Certainly. Prentice McNamy gave us the tip on the asteroids where Professor Phamign's laboratory might be located.♦ If we can find the secret of herculium we're in."

"Oh, I know that," I said impatiently, "but what makes me sore is this. Here we are, a salvage outfit, and that big bloated monopoly, Solar, has tossed monkey wrenches every time it was possible. And I have a hunch they're going to be in this, too."

"That's just imagination, Jake."

"Maybe," I said.

My eye caught movement at the far buildings, a flicker of light. It was Cap's helmet, reflecting dim far-away Arcton.

I let my lungs relax and Carroll heard the sigh.

"I told you," he said, following my gaze. "Both of 'em okay."

"Yeah," I admitted. "I was just nervous."

But as I watched Pat and Cap across the quarter-mile of bleakness, the feeling didn't go away. I was still scared. I still felt something was going to happen.

How right I was!

CAP got out of his suit and I glared at him. "Two hours!" I snarled. "You've been gone four and it's time to blast off."

His intense blue eyes were amused as he took out a pocket comb and smoothed

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* High Jack and Dame
☆ Thicker than Water
♣ Dead Run
♦ Little Joe

his silver hair. "I'm sorry if you were worried, Jake. But we had to draw up completely new charts. There wasn't any way to let you know. Pat will explain."

Pat shucked out of his suit and spread things around on the chart table. "The stuff they've got in that Center!" he said admiringly. "Got anything I've ever seen or done whipped hollow."

The stuff must be very good indeed, I thought. Pat, whose face was like baked mud, his nose a lump of red sandstone, and his eyes two dull emeralds deep-set in the muck, was the best pilot and astrogator I'd ever known. Carroll and I joined him as he explained the charts.

"We *might* have found the asteroids"—he put his finger on a cluster of tiny dots—"from the dope we got from Prentice McNamy back in Arcton City. But it would have been a long shot. My calculations were just one light-year off because I didn't have complete dope on the comet that had kidnapped 'em."

"Have any trouble in the Center?" I asked.

"No. They'd never even heard of the *Dolphin* or Jake Murchison." He looked up and grinned, which did awful things to his face. "Probably the only place in the System where you're not a by-word, Jake. Anyway, we told the Chief we were researching the comet that pulled the asteroids out of their original orbit and its effect on near-by objects. The Chief practically purred."

"I couldn't understand half what they said," Cap put in.

"Well," Pat said modestly, "I used to be in the Space Patrol, you know. They really put you through the jumps." He turned back to the chart. "Now here is the orbit of the group where we hope we'll find Professor Phamign's laboratory, and his notes on the secret of herculium. The present position of the group is here." He indicated a point on the red line.

"Now we figure on intercepting them here, the shortest curve between us and them. So we blast off in"—he looked at the chronometer—"in four hours, ten minutes, four and one half seconds."

"Oh, fine," I sighed. "I get all worked up and now we've got to loaf for four hours."

It was a few glum minutes before I could regard that statement with hollow laughter. I gave the control board an idle glance and saw needles moving. I turned on the screen and fiddled with the direction dial while the others held their breath.

I found it immediately, a ship smaller than the *Dolphin*, curving in for a landing.

"Well, it was a pretty dream," I said, "while it lasted. Looks like the fat's in the fission chamber now."

"No, look!" Carroll said softly. "It's only the supply ship for the Center."

True enough, we could make out the isobar insignia now, and felt some relief. "Still," I pointed out, "whoever's aboard is going to be curious. It'll only be a matter of time till somebody dopes out where we went."

"Maybe we'll already be there by then," Cap suggested.

"And maybe not. Anyway, I think we'd better take off immediately—before some curious character comes around looking for answers."

This didn't raise any cheers, so I went on. "Class will come to order," I snapped. "We managed to give Solar System Salvage Company, Limited, the slip. But we know they're looking for us. We also know they'll put all of their resources to work and they've got a lot more than Space Salvage, Inc., with our one little ship. They can fly orbits around us. We also know that Oliver Clayborne is no dope."

Carroll said, "Wonder how Junior is? It was fun slapping him around."

"I'll tell you how Junior is," I said. "He's fit to be tied. Now it was safe for us to wait here as long as the guys in the Center knew nothing about us. But there'll be people aboard that supply ship who know plenty. Our career hasn't been like a light under a bushel.

"So the word will go back, Junior will get hold of it and come high-tailing it up here. He'll talk to the Chief, find

out what we were after and *whammo!* They intend to have the secret of herculium, come hell or tidal wave."

"I think Jake's right, Cap," Carroll said. "As usual."

Cap thought it over. He always thought things over before giving commands. "Okay," he said finally. He spoke into the intercom. "Engine room, attention! Prepare for blast."

I WATCHED the supply ship complete its landing. Her port opened, and space-suited figures began to descend. One of them had red hair shining through her helmet and ran toward the *Dolphin.*

"Hold everything," I muttered and ran out to the air lock. I punched the green light before she had time to signal and presently Helen was in the ship, out of her suit and briefly in my arms. We hurried to the control room. Everybody spoke to her, then waited till she caught her breath.

"You've got to take me with you, Captain Lane," she said, panting from her run.

Cap frowned. "I'm afraid that's impossible, Captain Wall."

"You must! Listen to me. There isn't much time."

The story came out in a rush of words. Helen's face was prettily flushed, her green eyes fiery. Her polished comets were bright compared to Cap's tarnished pair, her trim uniform snappy beside his, baggy at the knees. She was young and excited, he was elderly and calm, but it was hard to decide which was the more dignified. Both Space captains.

That does something for you.

"They're planning to kidnap me to force Jake to tell what he knows," she said. "I learned it too late—I couldn't call for help. I was cornered. That supply ship was just about to blast and I took a long chance you'd still be here. I had to bluff like mad. But a man came aboard after me. He'd been following me. I didn't see him until we landed here. Well, you know what he's doing now—calling Oliver."

Everybody was quiet then while Cap thought it over. Helen put one hand on my arm and I covered it.

"It's a matter of ethics, to me extent," Cap finally said. "You're the daughter of Philemon Wall, president of Solar Salvage. You're captain of their crack passenger ship."

"No more," she said. "Suspended indefinitely."

That gave us food for thought. We digested it.

"Yesterday," she said, "I spoke *my* piece on ethics. I pointed out how Solar had stymied Space Salvage at every possible turn, with lies and slander and legal blocks. I said one man was actively responsible, Oliver Clayborne. I demanded his dismissal. The Board lowered the boom—on me, for conduct unbecoming an officer and loyal member of the company."

I put an arm around her. I didn't say anything. I didn't need to.

She took a breath and dropped her next bombshell.

"Later in the day Oliver resigned and chartered a high-speed converted cruiser. He staffed it with thugs—you could tell by looking."

"So no holds barred," I said.

"Right. He was going crazy trying to get a line on you and then he got the idea of holding me. He told me when he thought he had me. But I got away and he got a lump behind one ear." She smiled a little, remembering.

"May I say something, Cap?" I asked. He nodded.

"I say this in all respect. You're my boss, strictly speaking, though we all take a hand at running the job now and then. We've got to take her along. I don't like it. There may be danger. But we can't leave her with Junior's stooge here and Junior on the way. You can order her off the ship all right—but if you do I go with her."

"Naturally," Cap said. He turned and spoke a sharp command into the intercom, "Into acceleration bunks. Stand by for blast."

Pat cleared with the Control Officer and we were off.

CHAPTER II

Anything Might Happen

A MAN feels uneasy with his best girl around when there's a job to be done. Oh, I was glad to see Helen—I hadn't expected to before we got back. But there just wasn't anything to *do* with her. We didn't need her or her undoubted ability. And with her standing around, looking good enough to eat, I couldn't keep my mind wholly on my job.

I resented that and I also resented her understanding it. She was a Space captain. She knew what it took to run a ship. So she let me strictly alone and I did the same to her, and we were like a couple of animated sticks. Every time I looked at her I wanted moonlight and music on the piccolo and that made me mad.

I soon got used to this condition, and was able to concentrate on what we were going to do. I put my idea into words.

"What are we going to do?" I asked the room at large.

"Get lost if possible," Cap said.

"Why?"

Cap gave me a kind of pitying look and flicked a glance at Helen as though he understood the reason for my stupidity.

"I think the answer's pretty obvious," Cap said.

I appealed to Carroll. "Do you?"

"Yep," he said cheerfully. "Don't you?" he asked Helen.

Helen was blushing a little. She also knew why they were ganging up on me. "Of course, Jake," she said anxiously. "I see it. So does Pat."

Pat was grinning openly. "Plain as the nose on my face, Jake."

"That's certainly plain," I said. "But I don't get it."

Cap said, as if I were three years old, "To lay a false trail, Jake. We find another group of asteroids—there are several in that belt—and he'll think that's the one we're after. So we lose him and go to our group."

"All right, *students!*" I snarled. "Answer Teacher some questions. Did you ask the Chief about our group?"

"We did."

"About any other group?"

"No-o." Cap was thoughtful. "I see what you're driving at."

"Is Junior after us or after the secret of herculium? Never mind answering. He can question the Chief and he'll head directly for our group, not follow us on a false lead. Does that suggest any course of action? Let the bright boy in the Captain's uniform answer."

Everybody was grinning. "Let's go," Cap said to Pat. "Full speed. We'll have to get there before Clayborne."

"And away too," I said. "Don't forget his shipful of plug-uglies."

"By the way," I said formally to Helen. "You don't have to answer this if you don't want to, Captain. But have you any idea what your father—your company—intends to do if Junior can get the formula?"

"I don't consider that I'm violating a confidence, Lieutenant Murchison—especially since you put your finger on it recently. Solar System Salvage intends to establish a monopoly, of course."

"And sell to whom?" I asked.

Helen suddenly looked embarrassed. "I'm afraid I kind of spilled some important beans," she said ruefully. "But I was so angry! I practically accused the Board of being thieves. I pointed out how Solar had caused that cargo you salvaged from the *Astralot* to be impounded by circulating rumors that Space Salvage, Inc., was a gang of pirates.

"I told them that you'd done all the work on locating the probable whereabouts of the laboratory and how you'd saved our crack passenger liner and all aboard and I—" She broke off, looked away.

"Nothing wrong in that," I prodded. "Very decent of you, in fact."

"But then," she went on apologetically, "I told them what you were intending to do with the formula. I said here

was the most valuable thing in history and you were going to give it to the Interstellar Council to be used for the good of everybody.

"I guess I made quite a speech about how houses and streets could be made to last forever, how Space Patrol ships could be made absolutely invulnerable and so wipe out piracy and all the other things you told me. How you were going to insist on mass low-cost production and your cut would be just a royalty."

"What did they say to that?"

"They smiled!" she spat. "Fatly. Said they hadn't thought of it from that angle."

SHE cupped her chin in her hands and frowned at the deck. "This is rather hard to explain. It's more a feeling of what they meant than what they said. There was some whispering and passing of notes and—"

She broke off. We waited.

"Well, it adds up to this," she said, finger-combing her hair. "Whoever has the secret of founding herculium can control the Interstellar Council, can *be* the Council in effect. Offer it to them with strings attached, then pull the strings. Does that make sense?"

"Too much," I said. "Could be done, in the guise of a boon to the System. I've got a good notion to tear the formula up if we can get it."

"*Jake!*" Helen exclaimed.

"Oh, I guess I really wouldn't. But we'd be the richest characters in the System. We could buy and sell Solar five times over and buy us a nice private planet to boot—if that formula either doesn't exist or gets destroyed."

"I don't think you'd get away with it," Helen objected. "Solar would figure out some way to stop the sale."

"How? Herculium can't be analyzed, and the secret of founding it was known only to Phamign. If we can establish that his notes aren't in existence, then we've got all the herculium there is or ever will be. We can get our own price but even that won't be necessary.

"Bidders will flock to us. Think how much a big manufacturing outfit would give for just enough to coat all moving parts of their machinery and make 'em last forever. Just an example."

"Mmm, yes. But if you tore up the formula, you wouldn't sleep nights—or would you?" she asked anxiously.

I sighed. "Oh, well, it was an entertaining thought."

Carroll had been giving the stern screen the anxious eye for some time now, and since it wasn't like him to be nervous, I took a gander. Nothing but stars.

"What's the matter?" I asked him.

"I was just thinking," he said gently, "that if it should come down to hand-to-hand combat with Junior's outfit we'd be pretty well sunk. They're a cinch to be armed."

"Against the law," I pointed out.

Carroll ignored that with a snort. "Our only chance is getting in and away before they get here and I don't think much of our chance."

"We've got a head start."

"How much, though? If Junior's man at the Center finds out where we're headed—and he can—and if he relays that location to Junior he doesn't even have to put in at the Center. He can make a direct shoot at the asteroids. That would save him a lot of time. He might even get there before us"

He was so right. This was something to think about. I hated to depend solely on speed. There's nothing ingenious about it. It's just like depending on brawn though that's much better than speed if you can't run fast. And we couldn't—compared with a converted cruiser.

But there was nothing to do about it. We had nothing on board we could jury-rig into a weapon. If Junior got there first, events would have to take their course, probably a violent one.

Pat said we'd know in thirty minutes, and I checked over the life boat. We'd stocked it with all sorts of detection devices just in case they might come in handy. There was plenty of air and spare cylinders for space suits. We had every kind of tool aboard from pick-locks to high-speed drills.

My good old uneasy feeling dropped over me again as I went back to the control room. I couldn't justify it intellectually because there was nothing to be afraid of. Or so I thought.

"There they are," Pat said.

A cluster of black dots began to grow and separate on the screen. "Pick the biggest one," I said.

Presently one large irregular shape filled the screen, and Pat swerved to match its orbital drift and direction.

"We'll go down and have a look," I said.

"Jake," Helen said softly.

I looked at her. Her eyes were wide and soft, her lush mouth parted, and I knew that whatever she asked me I would say yes.

"Let me go with you, Jake."

"No," I said.

"I know I don't belong here," she went on in a rush. "I have no rights, legal or otherwise, but—" She faced the others defiantly. "Can I help it if I don't want him out of my sight?"

CARROLL sighed. "I don't know what it is but you sure got it, Jake."

I was a man of mixed emotions to put it mildly. My gal, my chosen woman—whither thou goest and all that stuff. I wanted her along so badly I ached.

"Anything might happen," I said. "You'll be safer here. If Junior's thugs arrive unexpectedly Carroll and I can handle the situation better than you and I could."

"Why?"

"You've got things Carroll hasn't," I said dryly, "but I think his shoulders would be better in a brawl."

"But they won't do anything to me," she said. "I'm the boss' daughter."

"No more. Junior doesn't work there any more."

"I've been thinking that over," she said. "That resignation was phony."

"Again, please?"

"So that Solar wouldn't be officially connected with what is a stinking unethical operation. If he gets the formula you'll see him reinstated. It stands to reason. He can make more in the long run by scringing along with Solar than by going out on his own. He'll be the white-haired lad if he comes back with it."

"That sounds reasonable," I said. "So what?"

"Can't you see? He won't let anything happen to me."

"He was going to kidnap you. Or so you said."

"And with my father's knowledge and consent I'll bet you anything. He wouldn't have hurt me, he'd have just threatened you."

"You still can't go. That's all theory."

"I think she's got a point, Jake," Carroll murmured.

I looked at him, astonished. "What's eating you?"

"She might as well go, Jake. There's no sign of Junior and we can detect him in plenty of time." He grinned. "And then, I guess it's the Cupid in me."

"Okay," I said. "Come on."

She followed me like a spanked pup and I couldn't force myself to apologize and kiss her. I was scared and I didn't know why and—therefore—angry.

We got into space suits, into the life boat, went through the lock and were in starry space headed for the big dark lump below.

"Testing," I said into my helmet talker. "Carroll?"

"Yeah, Jake? You're coming in fine."

"You keep that helmet on all the time we're out," I said. "Helen?"

"Yes, Jake?" Her voice was crisp and formal.

"Don't do anything unless I say so."

"Very well, sir."

"Aw, honey—" I began, then remembered Carroll listening in. "Phooey!"

I dropped to within a few feet of the asteroid and began to circle it.

"Keep a sharp eye out for anything that looks like a building or anything unusual."

"Yes, Jake," Helen said. Her voice was warmer now, softer.

We crawled along. A needle on the panel flickered, then rose halfway up the dial.

"Oh-oh. Something radioactive, Carroll."

"Might as well find out what, then."

I landed, and the needle went further to the right. We debarked and my wrist analyzer began to flash a bit. I looked around.

We seemed to be standing on a sandy plain, several acres in extent. I tried one direction, but my analyzer didn't change. Another. Same thing. I tried all points of the compass with the same result. So it had to be the sand.

I reached down to scoop up a mittful and my analyzer glowed a dull red. I held it against the sand, and it turned a bright green.

"Good lord! Sand. Carroll. Eight-point-four, on the Wechreigen scale."

Carroll's whistle was shrill in my ears. "How much sand?"

"Millions of tons."

"Listen, Jake, what say if we jettison some—" He broke off. "Hold on," he said quietly after a moment.

It almost makes you believe in premonition, I thought. For something was wrong. That was certain, judging by Carroll's tone.

We stood motionless for a couple of agonized eons until the *Dolphin* suddenly blazed into life above us. Carroll said, "We've got to run, Jake. Can't tell you why now. I'm too busy. If we get away we'll be back for you. If not good luck."

CHAPTER III

Helpless Sitting Duck

"If we get away!"

Get away from what? *"If not, good luck."*

"Carroll," I said into my talker, "Carroll. At least give me a hint."

No answer. He must have taken off his helmet. Helen and I stared towards each other and a terrific sense of loneliness dropped over us. The cosmic dark was so immense with its scattered and shining jewels and we were so small. We drew closer together and without a word walked to the lifeboat. We wanted inside something smaller than the vast and empty dark.

My wrist analyzer continued to flash until we were through the lock and in our seats.

"Jake," Helen said softly, "I'm scared."

Part of the make-up of a human male is the desire to protect and comfort his woman and I'm a human male. I wanted to give her a pep talk, to hold her, to murmur nonsense in her ear, tender nonsense. But did you every try it in a space suit, rubbing helmets, clasping mittens? It's no good. I didn't even try.

Anyway I needed some pep talk too. For I was scared, myself. "Oh, it'll all come out all right," I said carelessly. "We can depend on Carroll. He'll get us out of this."

"But what are we *in*? That's what bothers me."

"Me too—but there's nothing we can do until we know more. Just sit here."

"But what if they don't come back, Jake? What can we do? I don't want to—" She broke off.

"Die? Neither do I."

"It's so—so lonely here, Jake. Could we go somewhere else, where we might be picked up?"

I had to let her have it straight. "Not a chance, baby, with our fuel supply. We're too far from anywhere There's the sun of Corfus over there, that big blue star. If we could reach Corfus we could stay alive. But we have to stay here. It's too far away."

Helen pointed. "What's that?"

Far off, so far it was almost invisible, was a moving trail of fire. Moving fast, much too fast to be the *Dolphin*.

"Maybe Junior," I guessed. "It's a spaceship, at least."

Whatever or whoever it was it soon vanished. But it did something for our spirits. Friend or foe it was life. When the *Dolphin* disappeared it had seemed as if nothing existed except us two. But now we began to get our perspective back.

"We ought to be hearing from Carroll pretty soon," I said.

"I wish he'd hurry. I'm dying of curiosity."

"It doesn't make sense," I muttered. "There isn't any emergency that would justify leaving us here. Suppose it were pirates. What's the use in running? The *Dolphin's* a tub beside a pirate ship. And if it was Junior where's the sense of running? He knows where these asteroids are. We were here first.

"The smart thing would have been to go on with the search and let him land. Then it would just be a game of hide and seek with us trying to stay a couple of jumps ahead of him. The worst that could happen would be for him to beat us to the laboratory if it's here."

"Carroll sounded awfully serious though."

"That's what bothers me. Let me think."

The worst that could happen, I thought, would be that the *Dolphin* wouldn't be able to come back. We'd be stranded here, out of communication with anything. We could last, oh, say six weeks, by rationing food and being careful with our oxygen supply. Then we would simply starve to death.

But I couldn't figure even a fantastic reason that would bring this about. The whole thing was out of focus. One thing was certain—I was going to raise Cain when I got back aboard. *If* I got back aboard.

Carroll's voice was suddenly faint but clear in my ears. "Jake, Jake! I hope you can hear me."

"Go ahead," I began but his voice went on and I lost a couple of words.

"—try to answer, because I won't be able to hear you. I worked out a beam for this helmet transmitter and I'm using the ship's power. I hope it's enough because you've got to know what's cooking."

HE paused for a second and I could almost feel his tension.

"We're in the worst possible jam, Jake. We hated to leave you kids there but we had to. Here's what happened:

"Junior suddenly spoke to us on the screen and gave us a choice. We could either go back to Arcton and leave the field to him—or he'd blast us out of the sky. He's armed, Jake—I mean his ship is. I don't know how he managed it but he's got a disintegrator—like those that only the Space Patrol is allowed.

"Well, you can see our only chance was to try and get away.

"We were dodging around some asteroids for a while, with Pat doing some marvelous piloting, until Junior put two and two together.

"You see, when he first called us, I was wearing a helmet so as to keep in touch with you. He overlooked that at first and when we ran he altered course so as to prevent us from getting back to where we could call the Space Patrol. But just a few minutes ago he put the thing together and told us so.

"First he demanded to talk to you, said maybe we could dicker, and he wouldn't have to wipe us out. Then he wanted to see Helen. Then he said he knew where you were and it put a new face on the picture. He pointed out that he couldn't kill us while you were still at large because he wouldn't make the mistake again of underestimating you. He said that as long as you were alive, we would keep right on living, and he wasn't going to chase us any more.

"So now he's just patrolling between us and the Center at a spot that would cut us off if we tried to make a run for you. Pat's so much better as a pilot we might dodge him forever if you and Captain Wall were aboard—but we can't get to you.

"Maybe we made a mistake in not taking you aboard but I don't think so. We had a chance to get away if we lit out at once. He'd have caught us if we'd waited for you.

"But here's the worst, Jake. He's sending a lifeboat full of armed men back to the group where you are, with orders to kill you and Helen. As he pointed out he can afford to do that because he's pretty well sewed us up. All he has to do is wait till we run out of fuel and we're a clay pigeon. He has vast quantities of reserves.

"So you'd better find a hiding place

or something. Well, I should tell you what to do. You're on the scene and can figure it out better than I.

"That's all for now. I'll keep you advised of changes. I hope you heard this, Jake. Oh, another thing—with the disintegrator he can blast the evidence of murder, even mass murder, into nothing but energy that will dissipate shortly. Then he ditches his armament and returns to civilization with or without the formula and simply denies having seen us. So we're given up for lost. Cute, huh?

"Well, so long, Jake, and you, Captain Wall, ma'am."

I had kicked in the drive and we were moving slowly before Helen could finish, "Jake, he wouldn't dare—would he?"

"I'm not staying here to find out," I said grimly. "We can discuss the matter later. Applied psychology isn't as important now as flight."

"Then why don't we go full speed?"

"Because, my pet, if I blast on this side we'll show a trail. I don't know how close they are. I want to put this asteroid between us and them before using full power. Not," I mourned, "that that will be very much. Helen, we're in very serious circumstances."

"But can't we just hide until they go away?"

"Look, dear. There are only about twenty asteroids of any size in this group. I think we can stay out of their way until our fuel runs out. That won't be long because we wanted the space for equipment, figuring on short hops and coming aboard to refuel now and then. So when we're out of stuff, we're just a helpless sitting duck. Okay, here we are—strap for acceleration."

I GAVE the boat full blast and we got heavier and heavier. It was like draining my own blood—and, in effect, it was just that—using fuel that way. But we had to get away from that asteroid.

I had picked it for the first search. It was logical Junior's thugs would do the same. After five minutes of full acceleration I shut off the power and we were in free flight toward the center of this group of drifting hunks of matter.

"No talking from now on," I cautioned. "They're probably wearing standard helmets too."

We drifted in the silent dark, the dim glow of the instrument panels accentuating rather than diminishing the feeling of being lost in a limitless void. I skirted asteroids small and large and bored in toward the center.

This was a huge hunk of lava (my infra-red beam told me) pitted, scarred and tunneled. I went into a tight orbit around it, searching for what I wanted. I finally found it, a wide level spot, bordered on one side by tortured spires and grotesque cave mouths.

I pulled in close, playing the jet controls like an accordion, and landed opposite the spires and caves as far from them as the topography allowed.

I motioned Helen to silence, sealed the boat and, using some of our precious emergency air supply, pressurized it. I shucked out of my suit while she watched, wide-eyed. I opened the locker where we kept spare parts, took out the two converters and smashed them. Then I went aft to the engine room and smashed the converters we had been using.

This was too much for Helen, who stood horrified in the doorway. She took off her helmet.

"Have you gone crazy?" she demanded.

"No," I said and emptied the remaining fuel. "You want to get out of here alive, don't you?"

"But we can't get out of here at all now!"

"I wish you'd put your helmet back on," I said. "If you hear those guys, let me know. I've got to work fast and can't argue."

"But, Jake—"

"Please! I'm in command."

"Aye, aye, *sir!*" she snapped, and obeyed.

I unlashed the big tool box next, tied a leading cord to it and floated it to the air lock. I anchored it and repeated the maneuver with a food locker. Helen

seethed. I could tell by her eyes, as I got back into my suit and adjusted the Artigrav.

I took the biggest flashlights—about three feet long and thick as my wrist—gave one to Hele. and blew the boat free of air. I motioned her to follow and started for the lock.

If looks were lethal it would have been all over with me but the burying. I gave her the cord for the food locker, took the tool box and stepped out behind her. I closed the airlock and lighted our way with brief flashes across the one hundred-foot space to our hiding place.

I stowed the locker in one cave, the tool box in another, ourselves in a third. This was a rather tight fit and Helen's body, necessarily pressing against mine, was like an angry exclamation point.

But I couldn't grin about how she would apologize later for not trusting me because I wasn't sure I hadn't signed our death certificates. I was operating partly by hunch and partly by logical analysis of known factors.

Still I could be wrong, scuttling the boat, thus destroying any chance of its ever rising again. And if I was wrong we were dead.

We both jumped when the voice sounded in our helmets.

"Try this one," it said.

We scanned the sky, the limited portion of it we could see, for a moving light or a shape drifting between us and the stars.

"What's that?" the voice suddenly asked. "Down there!"

THERE was no way of telling, of course, whether he referred to our lifeboat or whether they were examining a nearby asteroid. The talkers were non-directional, and unless you had a known point of reference you couldn't locate the speaker.

"That's them!" another voice said.

"Ahoy, Murchison!" the first voice hailed. "That you?"

"What do you want?" I asked.

"You," he said succinctly. "You want it the easy way or the hard way?"

"Riddles yet," I said.

"We want you and Captain Wall. You can step around and surrender or do we have to get tough?"

"Who's *we?*"

"Never mind that," he said impatiently. "There's twelve of us and we're armed. You're not, we know that. So don't be a fool."

"Heaven forbid!"

"All right, smart guy!" he snarled. Then, evidently to the pilot, "Land. Over there."

This was it. Everything depended on where "there" was. If I had calculated correctly it would be almost in our laps.

It was. The lifeboat drifted to rest not twenty feet away. I patted Helen to stay put and slid to the stern of the boat to where I could count the number that would spill out of the lock.

"This is your last chance, Murchison," the voice said. "You have ten seconds."

"You can have nine of 'em back. Come and get me."

They began to unload then until eleven suited figures stood in a huddle, eyes turned toward our empty lifeboat. They left the airlock open. That meant one man still inside, probably the pilot. It also meant the ship was not pressurized, so he couldn't hear anything but voices in his helmet. It wouldn't matter how fast we went aboard, or whether we banged into things.

"Spread out," the leader commanded. "Don't take no chances. Murchison," he called, "I know you're a cutie-pie, but you haven't got a chance. Get wise and give up."

"Bring that stuff over here, Helen," I ordered. I turned to watch her lead the tool box and locker out of the caves as I went right on talking to the attackers. "I warn you, whoever you are, that I can get at least eight of you before you get us—that is, if you've got the nerve to try, which I doubt."

Somebody made a wise crack. "Is that so?"

"Sure, you're all cowards. I never saw a rat, yet that wasn't. Well," I taunted

as I started for the lock, motioning Helen to follow, "what's keeping you? Trying to enjoy life a little longer? What are you stopping for? Prayer meeting?"

I was inside the lock now. I couldn't look back to see how Helen was doing but she'd know enough to get in and close the lock.

"Pete," the leader commanded, "you get the airlock and stand back. The rest of you guys—I'm going in. Cover me and come a-running if I say so. Afraid, huh?" he snarled.

"Sure you're afraid," I said as I went forward cautiously toward the control room. The pilot was there, straining his eyes toward the attack. "Pete, especially. He's afraid to try for the airlock."

"Oh, yeah?" Pete snarled? I hit the pilot on the back of the neck as hard as I could swing the heavy flashlight.

His startled "Awp!" was lost in the general noise and I flung him aside. I kicked in the drive and we were off.

The sudden flare of the jets caught their attention and since they expected me to be still in my own lifeboat they didn't get it.

"Harry!" the leader called. "What's the matter? Come back here."

"Happy hunting, boys," I called and we went away from there.

CHAPTER IV

Cross Fingers!

HELEN staggered in, her face twisted in pain. "I think I have a broken rib," she whispered. He lips were white, her eyes as big as poker chips.

"Stay conscious for five minutes," I said. "Here, take the controls. Go back where we were."

She took over, and I went into action. I sealed the craft, pressurized it and got out of my suit. I removed the unconscious pilot's helmet, tore out the communicator, refastened it and hunted up some cord. I hogtied him and flung him aft along the passageway.

I helped Helen out of her suit and examined her. She showed all the symptoms of a simple fracture.

"Can you hang on until I get some tape?"

"Sure," she said through her teeth.

She fainted once while I was taping her and I had to go through some complex motions piloting the boat and finishing the job on her. Then she smiled weakly at me.

"Sorry, Jake."

"Better now?"

She took a tentative deep breath. "Better, Doctor."

"How'd it happen?"

She smiled wryly. "I forgot to turn loose. I'd got the food locker in and was still hanging on to the tool box as I closed the lock. I was braced for the take-off but the tool box wasn't. It dragged me against the manual lock valve and two things snapped—me and the towline."

"I'm very sorry, baby, but you can see I had to move fast."

"Oh, I'm not blaming you, Jake. It was my own stupid carelessness. Teach me a lesson. Oh, by the way, Mr. Murchison, may I compliment you on a most successful trick."

"Thank you, Captain, ma'am."

We looked at each other and laughed. Not because there was anything funny—it just seemed like a good idea.

"Now," I said, "can you take over while I see about our passenger? I don't know whether I broke his neck or not. And don't care."

I removed Harry's blaster, belt and spare cylinders, and hung them on myself. Then I towed him into the control compartment and took off his helmet.

He had a thin, dark face, a pinched mouth, sharp chin and, as we could presently see, unwavering rodent eyes, black and defiant.

"So now we've got another thirsty mouth to feed," I said. "Too bad I didn't break your neck."

He said nothing. His eyes were steady on mine.

"What had we better do with him?" I asked Helen.

"What *can* we do?"

"Mmm, several things. I could burn him with his own blaster but that's messy." His eyes didn't change. "Or we could leave him at our next stop. I took the communicator out of his helmet. I could stick that back on him.

He wouldn't be able to hear anything but his breathing and heartbeat and he couldn't hail anybody who might come along before his air gave out or he froze, but he could see and move. Did the eyes show a flicker of fright? It was hard to tell.

"Or," I said pleasantly, " we could take him back and drop him off with the rest of his gang. I imagine they'd like to talk to the guard who let his ship—and himself—be stolen."

"No!" It was a rasping whisper, and pure terror was in the eyes. "Mr. Murchison, sir— Anything else! They'd tear me apart."

"That," I snorted, "would break my heart. We've got no place for you, Harry."

"Why not?" he pleaded. "I'm handy. I'm a good pilot. I could help."

"You're just so much extra weight to me. Besides, I wouldn't trust you two millimeters away, much less at the controls."

"Home Base coming up," Helen said. "Do we land?"

"Yes. Where we were before." I looked down at Harry. "I'll deal with you when I'm finished here."

"What are we doing here, anyway?" Helen wanted to know.

"Oh, I've got an idea I want to try."

"I suppose," she said wryly, "you're going to throw the drive away this time."

"No, but I might dump the fuel."

"You're the most exasperating man, Jake Murchison. I could have bopped you when you smashed those converters."

"Why? I wanted this boat. It has Wechreigen converters, and they may—just may—work on this scheme. Ours wouldn't have."

I GAVE Helen the blaster. "You keep an eye on Buddy Boy. I'm going to make a quick survey on board, then I'm going out. You'd better put on a helmet when I leave."

There was no point in wishing Carroll were aboard but I went ahead and wished it anyhow as I examined the converters and the drive tubes. I wasn't exactly ignorant but I never kidded myself that I had Carroll's genius for fission drives. I had to play this thing by ear but if I turned out to be correct we were in the clear—temporarily, at least.

I emptied the converters into a storage tank and made some dial settings from memory and by guesswork. Then I went back to the control room.

"How much do you know about Wechreigens?" I asked Helen.

She didn't move her eyes or the blaster away from Harry, who was a tangle of cord against a bulkhead. "I know how they work," she said, "and I can repair them. What do you want to know?"

"Well, here's the deal—we've got plenty of nitrogen fifteen. The radiation factor in our fissionable material is two-point-eight. But that sand out there is eight-point-four.

"If my hunch is correct and I've adjusted the converters correctly we'll get something like four hundred percent more efficiency, which puts us in a spaceship class. I've set the feeder control at six, and the drive intensity at eighteen. How does that sound to you for an experiment?"

"I'd cut the intensity to twelve," she advised. "It may take it at the higher figure, but you don't want to make a nova out of us if you're wrong. Radiation converts that nitrogen to nigtrogen thirteen and helium, and you know what happens if that process takes place too fast."

"We wouldn't care about anything any more," I agreed.

"But what's the idea, Jake? Why take a chance?"

"We're clay pigeons if we just stay here. Clayborne is coming eventually to find out what happened to his gang or he'll send somebody. But if this sand will work and I don't blow us up finding out we've got a chance to make Corfus.

More room to hide there."

Helen shuddered. "From what I've heard of the place we'd be just as well off dead."

"We'll find out maybe. Willing to gamble?"

"As you pointed out," she said wryly, "what can I lose? But don't be any longer than you can help. We can't even move now."

"It'll take me about an hour." I looked at Harry. "Was there any time agreement?"

"Find out!" he snarled.

I gave Helen her helmet and got into my suit. "Keep your eye on him," I warned her. "Don't hesitate to kill him if he acts up."

She nodded and I went outside with a large lead box. I scooped this full of sand, took it to the engine room and went to work. Finally I was finished.

"Cross fingers!" I yelled.

I was experimenting with the absolute minimum of nitrogen, but even so I had to keep swallowing my heart. If something went wrong, I'd never know about it.

I handled the control valve as if it were an angry cobra. Nothing happened. I stepped up the radiation a fraction of a degree at a time, up, up—

CAME a hiss and my heart pounded. Then the reaction began and I could sense tremendous forces surging in the chamber. I turned on the analyzers now, and saw that I had been a touch off on the radiation factor. At sixteen the efficiency level rose to 98.2 per cent—an unheard-of figure in these converters.

"Jake?" came Carroll's faint and gentle voice. "More bad news. Clayborne just left his ship in a life boat, headed your way. I hope you can hear me, Jake."

"Oh Lord!" I said to Helen. "I can't possibly finish before he can make it. Let's hope he doesn't find us."

"Hurry, Jake," she urged.

I resisted the impulse to ask what she thought I was doing. I didn't dare hurry. I had to take it a step at a time, shielding off all possible radiation and transferring the fuel again. If I hurried we might all go up in a blast—if I didn't we might be caught with our atoms down.

I was almost finished when I heard Clayborne's voice in my helmet, calling his men, who had fallen silent since Carroll had spoken to me

"Pete! Harry! Where are you?"

"We're on the center asteroid, boss," Pete's voice answered.

"Well, did you find Murchinson and Miss Wall?" Junior demanded.

"Yeah, boss," Pete answered uneasily.

"Good! Everything finished?"

"Well, not exactly, Mr. Clayborne. We've got their lifeboat but—"

"What's holding you up then?"

"Now look, Mr. Clayborne. Don't get sore. You see, it was like this—uh, Jake landed here and we found him but he'd wrecked his lifeboat and we rushed it but—"

"Where," Junior said through his teeth, "is Jake Murchison?"

"Well, we don't know exactly. He's got our lifeboat—and Harry."

The sudden hush was more eloquent than curses. I could almost see Clayborne's boyish face falling into grim lines, his small blue eyes turning to cold steel. I'll bet his professional salesman's smile faded fast.

I could afford a small grin as I connected the final controls and went back to Helen. Without speaking I motioned her into an acceleration bunk and padded her ribs against shock. I tossed Harry into another and took the pilot's chair. I crossed fingers at Helen and took off.

Our flare lighted the sky for miles until I had it properly adjusted.

"Good Lord!" Junior's voice exclaimed. "What's that?"

"Murchison!" I said. "If I were armed, I'd wipe out your thugs. But I'll see you later, Junior. That I promise."

"But that can't be our lifeboat," he protested. "It just can't."

"Have it your way," I said indifferently.

"I'm going to follow you, Jake," he

said grimly, "as soon as I get these beauties of mine aboard my cruiser. You can't hope to escape so I'll give you one last chance to surrender."

"Ho hum," I yawned.

"Okay, then. You can take the consequences."

"What are we having for lunch?" I asked Helen.

CHAPTER V

"More! More"

LIFEBOATS were not designed for space travel. Not that their sturdy hulls couldn't take the strain or their tubes couldn't stand the heat—these were of the same materials as their mother ships. There simply wasn't room to generate power from known fuels.

They were for emergency escapes or short exploring trips. Not so this captured boat. I seemed to have all the power in the worlds behind my panel buttons. It was exhilarating and I checked the impulse to shove it up to full acceleration.

But I kept it down to two G's in deference to Helen's rib until we straightened out in a slow curve to Corfus, growing bigger and bluer as we rocketed along under seat-of-the-pants astrogation.

I cut in the automatics and turned to Helen. "Okay?"

She gave me a weak, white-lipped smile. "It was pretty rough for a while but I don't think there's any internal complications. I ought to be as good as new before long."

Or dead, I though to myself. "You need food," I said.

"I want to know something first, Jake. We're headed for Corfus. Why? What can we gain?"

I'd been so busy I hadn't had time to put answers into sensible thought. I had acted instinctively. I pondered a minute, saw the answer.

"Time," I said.

"But for what? Suppose we reach there safely. Suppose we hide. For how long? And what after that?"

"You heard what Claybourne said. He's going to follow us in his cruiser. I don't think he can catch us before we can hole up. Here's the main point—he knows that we've got no place to run except Corfus. But Carroll and Cap don't know anything. When Junior takes off, leaving them unguarded, they'll follow as best they can."

"Why won't they go back to the Center and inform the Space Patrol?"

"What would they say?" I asked. "That an armed cruiser went away somewhere, that's all they *could* say. The Patrol would just have to wait for further information before they could hope to locate Junior. No, Carroll will figure something new has been added and will string along to offer help. That's what I'd do."

"Mmm, yes. I see your point. But—"

"We had time working against us back there," I pointed out. "But now it's working for us. Junior has to find us before we get reinforcements, or his fat's in the fire. Maybe we can stay hidden long enough, maybe not. It's a long gamble but it's all I know to do."

"Yes, but Corfus!" she exclaimed.

"I know," I admitted. "It's supposed to be deadly. Let's see if we can find out anything about it."

I rummaged in the chart locker and found Romanson's standard reference text, and on page 842 a brief summary of known information about the planet.

It wasn't much. Corfus had never been completely explored, was considered worthless because of climatic and geological factors. All this in dry, undramatic phrases:

> Distance (mean) from blue Sun of System, 65,231,000 mi.; diameter at equator, 7,542 mi.; axial rotation, 16 hrs.; orbital revolution, 254 days. N.B.: At intervals, winds of hurricane force (15.6 on Carson scale) and tidal waves occur, causing much damage to soil and flora, much distress to fauna, of which there is one known type and one suspected. Observed by Jackson at a distance were what appeared to be flying reptiles; suspected but not verified was something black and big and hairy.

No, not much, that—but when those

phrases were translated into personal experience, we could see why. They were too much for the clumsy inaccurate tools of langauage.

Meanwhile there were things to do and quickly. Ever since Helen had cracked her rib I'd had the nagging thought that I should survey the damage, if any, done by the tool chest and food locker. I examined Harry's lashings, checked Helen's pulse, and went aft.

It was a shambles but not as much as it could have been. The food locker had brought up against a chromasteel beam, and the tool chest had smashed into the locker. Canned and packaged goods lay in driftrows against bulkheads and broken glass, and spilled liquid added to the clutter. The place needed policing and I knew just the boy who could do it.

"I don't want your word," I told Harry. "I don't think it's any good. If you bat the wrong eyelid I'll burn you. Get back there and clean up the mess and fix us some lunch."

I untied him and he went without a word, though his eyes were bright with unwavering hatred. I set myself where I could keep an eye on the passageway and the control panel at the same time and we tore along through the void.

"My Uncle Samuel," I told Helen, "had a saying—'Don't ever think things can't get tougher. They always do.' "

That got a weak grin. "I don't see how they could get worse for us."

"We're still alive."

SHE shrugged, winced from the pain of the gesture. "I still think any change has got to be for the better. I suppose it's good-by to any further search for Phamign's laboratory?"

"Depends on how long we can stay alive. Look, you try to take a nap. It'll take Harry some time. I'll call you when soup's on."

She closed her eyes and I fell to thinking about the immediate future if any. But there were too many unknown factors. Would Junior be along most any time? Would he try to knock off Cap and Carroll and Pat first? Would they follow him if he didn't? Could we even manage to land on Corfus, much less live until we escaped or were rescued? Who could tell?

Suddenly, the drive cut out.

I raked the dials with a quick glance. Everything was dead. I got to my feet, drew my blaster and started aft.

"Stop where you are," Harry's voice called. "Or I'll set the radiation at twenty. So help me, I will."

Only the deadly quiet of his voice kept it from being matter-of-fact. I stopped. He might be just crazy enough to blow us all into dust.

"Throw your blaster back here," he ordered. "Easy!"

I considered my chances. I couldn't reach him by firing along the passageway. I threw the blaster. It floated gently aft until he reached out from the engine room door and grabbed it.

"Now get back in the pilot's chair."

I did so. The drive cut back in and he came forward. He stood where he could watch me and Helen at the same time, and the blaster was as steady as his bright black eyes.

"I'm gonna strap myself in my bunk," he said, "and we're really going places. I don't want those guys to catch me and you're gonna get us out, Mr. Smartie Jake Murchison. Buddy Boy, am I?" he snarled. "Didn't you think I was listening when you talked everything over with Cutie? Now get going!"

He got into his bunk but I made no move.

"Well?" he demanded.

"I'm going to try to make Captain Wall more comfortable and if you don't like it you can go to—"

"Stay where you are!" The brightness of his eyes went up a notch.

"That was my final word," I said and went to Helen's bunk. My back was toward him, my shoulder blades tensed for the searing shock that would mean exit Jake. It didn't come. I shook Helen gently. "Remember my Uncle Samuel?" I nodded at Harry.

She turned her head. Her green eyes were stricken. "Oh, no!" she moaned.

"I forgot the converters," I said. "I've

got to fix you as well as possible, because I think Buddy Boy has acceleration in mind."

Harry growled in his throat, but still the blast didn't come. I added to Helen's lashings and pillows. "I'm sorry, baby," I said.

"Me too, kid," she answered dully.

"How about some food for her?" I asked Harry. "She's not in good shape."

"Just be a waste if I have to kill her," he said with that quiet deadliness. "She gets it first if you get out of line. She ain't piloting this tube. *Get going, for heaven's sake!*"

I strapped in and gradually increased acceleration.

"Stop wasting time!" Harry cried. "More!"

I looked at him. The blaster was steady on Helen but he was too far away to make a jump for it. I turned my head. Helen was white-faced but she nodded.

I stepped it up to three G's.

"*More!*" Harry yelled, and added a high, insane laugh.

Helen had her lower lip between her teeth, her eyes and hands clenched shut. Four G's.

"More!" His eyes had a mad glitter. "More!" An acceleration-jag man.

A little blood was trickling from Helen's torn lip.

Four and a half G's—four and three-quarters . . .

Helen screamed. "I can't stand it! Jake!"

"More, *more!*"

I cut the acceleration. "We're going to hit atmosphere very shortly," I said. "Look." Corfus loomed big and blue dead ahead. "At this speed, you'll be flattened like a rotten grape. Fire and be damned to you. I'm going to get us down alive or quit now."

A little sanity came back to his eyes. Not much, but some. "Yeah," he said. "You're right." He giggled high and girlishly. "That sure was fun though."

I tossed another glance at Helen. She was apparently unconscious but, I hoped, alive.

I began a cautious approach in a long orbital swing to the blue planet. I couldn't judge what conditions were at this distance but occasional vague swirls like mist were cause for anxiety.

An ocean, a continent, another and another became distinguishable as I edged us down. Then a large continent, dotted at wide intervals with blue clumps of vegetation. The blue sun of Corfus lay cold in the far distance. Lower, lower, lower.

Then we hit atmosphere, and I was no longer in control of our frail craft.

CHAPTER VI

"That's what's out there"

I HAD come out of placid space into stormy atmospheres before but the forces that were at titanic play here above the surface of Corfus were beyond even imagined experience.

A downdraft grabbed us with windy fingers and the planet rushed up at us at sickening speed. My stomach felt as if it had checked out for parts unknown. We were like an eggshell in the hands of a giant.

I fought the wind with full power, trying to get the nose up so I could blast the stern jets. Inch by inch, it seemed, I gained—while the wind threw us at rocky crags mile by mile. I pulled out of it with only yards to spare—to be hurled upward and to starboard far out over a bare plain where wind currents fought with diabolic strength.

I couldn't think—I couldn't look to see how Helen was doing though I could imagine. Our sudden swoops, slips and plunges must be raising hades with her ribs. They were with mine, which were whole, and I had the added protection of a pilot's chair.

No chance of landing, of course. Our only way to stay alive was to stay aloft. I fought the vagaries of the resistless winds with the controls, the sudden shifts and speeds with tiring muscles, trying to keep from cracking ribs.

A sudden tail wind, while I was doggedly fighting a head wind, put us almost instantly miles and miles out over

an angry blue ocean where 500-foot waves slapped at us with angry crests. I sweated, trying to gain altitude, edged away from the watery destruction and a sudden updraft whipped us toward the stars.

I fought this, I fought the next unexpected shift, the next, the next . . .

Hour after hour—age after age, it seemed—the fight went on. The human body and mind can take only so much. Many times the mind will create a world of its own when the actual world can't be coped with and bodily reflexes will continue to deal with actuality.

That is partially what happened to me. I had to fight these unimagined winds. If I tried to ride with them we would be splintered against the earth, the sea or the mountains. But in fighting wind you're fighting nothing, so my exhausted mind made entities.

This one had the face of a boy who had whipped me when I was small in school—this one one of those fierce six-legged Kragorian hounds—this one Oliver Clayborne—and so on.

Then it was as if somebody had turned a switch. One instant I was fighting a downdraft that seemed to be my old astronomy instructor—the next we were moving away from the surface at only normal speed.

I was suspicious. I changed course. Everything was serene. I went into a wide circle high above a plain bordered along one edge with sheer, slick cliffs. The storm, temporarily at least, was dead.

My first consideration was a place of safety, even before looking after Helen. If those winds should come again as suddenly as they had gone I didn't have the strength to fight any more. An almost unutterable weariness of bone and muscle and a mind bordering on madness held me numb. I acted like a robot, searching the approaching cliffs for sanctuary, automatically registering topographical pecularities, automatically rejecting.

When I saw what I wanted I felt no sense of accomplishment, no elation of discovery. I slanted down toward the mouth of a great cave and, using nose and belly jets by instinct, inched the boat toward the big dark arch. Inside we would be safe—maybe.

AND as we moved toward the opening in the sheer cliff Romanson's "something big and black and hairy" swarmed out of it and vanisned.

I had only a momentary glimpse of it and though even it failed to penetrate my lethargy I was suddenly overwhelmed with a feeling of vague terror, of things obscene, unfit for the mind to dwell on, of Powers of Darkness beyond the ken of man, repulsive discards of far-off ages of superstition.

I gave no thought to how it vanished or where. I gave no thought to anything. I punched buttons woodenly, and the roar of our jets made hollow thunder as we entered the cave. An infrared search showed no evidence of other life and I set the boat down on a dry rock floor. Then I passed out.

* * * * *

I became gradually conscious that I was staring and had been for a long time, at an object on the floor with the uncomprehending fascination of a baby for something bright. The object was Harry's blaster, though its significance failed to register for long minutes.

Then I knew simply that I must get it but the magnitude of the task was frightening. The slightest movement seemed beyond the power of my battered, aching muscles. I fumbled at my harness with unfeeling fingers that couldn't even distinguish fabric from metal. By some miracle of conditioned reflexes I managed to get loose and tried to get out of the pilot's chair.

I kept commanding my arms to push, my legs to gather under me, and finally I was out of the chair, flat on my face. The blaster lay six feet away. It might as well have been six light years.

I heard a thump and moved my eyes. Harry, with blood trickling from one corner of his mouth, lay on the floor and glared at me. One of his hands made a clawing motion toward the blaster—

about as far from him as from me. There was no sound but our rasping breath as we used all our strength to creep toward that symbol of power.

We were equally matched—that is, neither of us could have punched his finger through a doughnut hole In the manner of snakes, using belly muscles and all others that touched the surface, we moved like sick blind snails nearer and nearer the blaster.

We rested, gulping in air with the sound of broken-down pumps, and moved another foot.

Our hands closed on it simultaneously, interlocked in such a way neither of us could work the activator—if we'd had the strength, which I doubt. We struggled with the weakness of dying ants over a burden neither of us could lift alone. But one spasmodic move we made in unison, jerking in the same direction. Our weakened fingers couldn't hang on and the weapon slid over against a bulkhead.

My fingers clawed their way to his throat as his did toward mine. We squirmed around so that we faced each other, on our sides, my fingers locked around his throat, his around mine. But neither of us could apply enough pressure to bend a piece of string.

We were completely harmless to each other yet we struggled with savage futile hatred. Sweat popped out on our brows and ran into our eyes.

PERHAPS because he hadn't been at the controls Harry began to recover first. He didn't waste his waxing strength on me. He pulled away and wriggled toward the blaster. I watched him dully, hardly realizing and certainly not caring that I had lost.

He reached the weapon and lay there panting, staring at it with a completely blank expression.

I closed my eyes, and again time passed.

I opened them later to find Harry sitting up, propped against the bulkhead, the blaster resting on one knee and pointed—though waveringly—at me.

I felt stronger now but not strong enough to attack or even to sit upright. But I had to make some kind of a move.

"Before you do anything drastic," I panted, "there's something you ought to know."

His lips moved in a sneer but he didn't waste any breath.

I began to tell him about the thing that had flung itself into nothingness as we entered the cave. I told him of the feelings which that brief glimpse stirred. I began gradually to build up a background for the thing, taking an episode from folklore here, another there.

I told of nameless horrors that had at one time held whole civilizations in thrall, of rites obscene and frightful, of terrible and unimaginable pain suffered by the victims of such beings, of the pitiable mindlessness of those unlucky enough to survive.

"And that's what's out there, Harry. It's probably moving in to investigate now. That blaster won't be any protection. Nothing will except the knowledge I just happen to have at my fingertips."

During my purely imaginary tale Harry's eyes had begun to show more than a normal amount of white. His face gradually turned green and he licked at his bloody lips.

He hesitated in a welter of indecision.

"I won't kill you," I said. "You know that. I've had plenty of opportunity. If you want to keep right on living you'll have to let me run the show. I know what we're up against. You don't and before you'd have time to learn you'd become little pieces of—"

"Okay!" he shuddered. He slid the blaster across the floor to me and I lay for a while in another access of weakness—this time, of relief.

All this time I'd had no chance even to look at Helen and she hadn't let out a peep. Was she still alive? I was almost afraid to find out.

Strength began to flow along the aching muscles again and I rolled and pushed myself into a sitting position. Standing was out of the question but I thought I might crawl on hands and knees to Helen's bunk. I scrambled over and pulled myself to my knees.

She was so *white*, except for the blood she'd bitten out of her lips. Her eyes were closed and as far as I could see she wasn't breathing. I felt for her pulse.

It wasn't strong, but it was present. It seemed fast but that was a minor matter. She was alive and my heart dropped back to where it belonged and sudden new strength helped me to my feet.

I unlashed her carefully and chafed her wrists as well as I could. Presently she opened pain-dulled eyes and examined me without recognition.

"It's Jake, baby. You're going to be all right now."

She turned on a weak smile. "What's for lunch?"

CHAPTER VII

Look out behind you!

I TOOK no chances with Harry. I ordered him aft and kept the blaster trained on him while he cleaned up the additional mess caused by our buffeting, and fixed us some lunch. I made him feed Helen; and she, much stronger now, kept him covered while he and I put away the stew he had contrived.

"I'm a sucker," he said with disgust after he had finished. He paused as if waiting for a contradiction, got none, and went on. "Falling for that fairy story about them things out there." He waved vaguely.

"I saw one," I said.

"Maybe so. But all that hooey about ancient times and that junk. I was weak, and you made your story so real I could feel 'em breathing down my neck. If I hadn't been knocked out I'd still have that." He gestured at the blaster Helen pointed at him.

"I know what you mean," Helen said grinning. "Jake can be awfully convincing. One night he almost made me believe it was his idea, not mine, to get out by ourselves under the stars and let him tell me how wonderful he is."

"You'll be better off," I told him, "if you cooperate with us. You tried. You lost. Now get on the winning side."

"Ho!" he snorted. "You don't think you can get away from Mr. Clayborne, do you?"

I shrugged. "Have so far."

"Sure, but that's just puttin' it off. He'll find you and that'll be that. You just been lucky up to now. It's about time your luck was runnin' out."

I must admit I thought he had something, though I made no comment. It did seem as though it were only a matter of time. We were free, in the sense that we still breathed of our own volition—but we were imprisoned as surely as if we were surrounded by stout bars. We couldn't get out of here for fear of another storm and even if we could where could we go? Nowhere. We had one possible chance.

"I wish I could figure exactly what Carroll is doing," I said to Helen.

She didn't take her green eyes off Harry. "I thought you had that clear in your mind before we left the asteroids."

"It seemed a good idea then but we weren't trapped in a cave that stands out like a sore thumb. I thought he'd come here, following Junior, but—"

"I hope he does," Harry said. "That's just what Mr. Clayborne wants, to get all of you together. Then, whammy!"

"You're a nasty little man," I said. "Shut up."

He grinned darkly.

"Could you maybe hide the cave entrance, Jake?" Helen asked. "It might only delay matters but Oliver might give up and go away if he couldn't find us."

"It's an idea," I admitted. I motioned Harry into his bunk. "Come on, Buddy Boy. Back into harness."

He almost swaggered to the bunk, and offered no resistance as I tied him so thoroughly he couldn't move anything but his eyes and lungs. He had it all figured out in his own head. Junior was sure to win and as long as Harry didn't collaborate he might be received back in the fold. Maybe he was right, I thought gloomily.

I examined the air outside with analyzers. Oxygen content okay, other elements present in proportions that were

more or less normal for us. It was breathable.

I took the blaster from Helen and looked at her silently for a long time. Then I said, "I'll be back as soon as I can."

"You *will* be careful?"

"Wary Willie, that's me. But—" I didn't want to say it but I had to. "But if I don't you'll have to use your own judgment. I've turned on the screen but not the transmitter. If we get a hail while I'm out you'll have to decide whether to answer or not. As long as the transmitter's off nobody can get a fix on us."

I went out with her whispered "Goodby, Jake," still in my ears, the feel of her soft fierce lips on mine. I wondered if I'd ever feel them again.

I hoped, of course. You always hope. But planets, and especially caves—I now discovered—give me claustrophobia. I like Space, limitless space without a fence around it. You feel free there.

The roof of the cave directly over the lifeboat was so high my flash couldn't touch it. I examined the floor and walls. They were perfectly bare. If that thing had been living in here it had left no signs of occupancy.

THAT wasn't exactly true. There was a haunting, somehow terrifying, smell that reminded me of what I had seen swarm out of the cave and disappear. And the vague horror I had felt then came back and prickled along my spine as I went cautiously to the mouth of the big cave.

I held the blaster at ready and prayed that it would be enough if I needed it. It was all I had except my bare hands and I almost retched, trying to imagine having to touch one of those nightmares.

I reached the entrance, and cautiously poked my head out to look right, then left along a wide ledge strewn with great boulders. No sign of life.

I looked out across the broad plain, five hundred sheer feet below, that stretched to the horizon. It was bare except for scattered clumps of small shrublike growths and in the weird blue glow of the sun of Corfus it had an air of rather pretty menace. I examined everything within my range of vision and saw no movement, nothing threatening.

A little breeze, ambling along from my right, also carried that haunting odor. Maybe that was just the normal smell here. If so you couldn't give me the place. I'd hate to go around the rest of my life with needles working along my spine.

I gave my attention to the great boulders, lying haphazard as if tossed, a handful at a time, by a giant idling away an afternoon. With my equipment, it was impossible to move any one of those boulders to help cover the mouth of the cave.

I stepped out into the blue sunlight and looked up. Directly overhead were several similar boulders and I thought it might be possible to pry loose a couple so that they would fall in strategic positions. My sole problem was to block the mouth of the cave so that a lifeboat couldn't get in. Any searchers, seeing that, might decide we couldn't be inside and go elsewhere.

The odor of terror was suddenly stronger and I stepped inside before I even looked upwind. Then I shoved one eye around the edge, and my heart flopped like a fish in a bucket. For there, about a hundred feet away, was one of the things.

It had four long black hairy legs, jointed at crazy angles, and a pair of appendages that could serve for arms. It had a tubular body about ten feet long and four feet thick at the maximum, also covered with black, shining hair. Its head reminded me of a squid with its enormous eyes and great hooked beak. And my spine got a new shipment of needles.

It did not resemble a spider in any sense when you broke it down feature by feature but I thought of spiders when I looked at it. Maybe it was the legs, which ended in what appeared to be wide circular pads.

It might have been growing there for all the movement it showed. Its very immobility accentuated the movement I

did see, far off and high.

It was a dot and at first I thought it might the *Dolphin*. It grew rapidly, and as it became clearer I remembered the flying reptiles of Romanson's report. For that's what it was, perhaps a hundred feet of gleaming scaly armor, vast leathery wings, a head like the legendary sea serpent. It didn't breathe fire but its eyes were a blazing red.

I didn't get all these details as it approached, but I had plenty of opportunity to tabulate its characteristics very shortly. It went into a long swift glide directly toward Black and Hairy, and I could have shot myself for what I did.

I guess it's because I am always on the side of the underdog. The flying nightmare had it over the sitting nightmare in every department—reach, weight, height and a mouthful of foot-long fangs hanging out.

"Look out behind you!" I yelled.

The effect was instantaneous.

Black and Hairy whirled and a high shrilling hurt my eardrums.

The dragon banked and that long tail whipped at its intended victim in a lash that blurred it was so fast.

IT never reached its mark. From nowhere—I swear it seemed so—came five other Black and Hairys and they were latched onto that whiplash. The dragon gave a kind of startled squawk, and its great pinions beat at the now foetid air.

But two members of the black gang had their four legs on the ground, and it became clear what those circular pads were. They were suction cups. The dragon raised a small hurricane with its wings but couldn't get away.

The first one swarmed up the dragon's scaly back past the beating wings and tore the dragon's head off. Literally. It just grabbed it by the neck with the appendages I had thought of as arms and tore off the head as you'd snap off one end of a banana.

A fountain of bright red blood gushed out over the edge of the cliff, and the dragon flopped down. I was glad that blood wasn't blue like the rest of this insane place. It somehow gave the scene a homey touch—red blood just like everybody.

The dragon went through some titanic death writhings while the black gang moved back, then lay still. Then the jolly quadrupeds moved in and tore it apart. I had never seen such an exhibition of sheer unbelievable strength.

You can take a tender broiled chicken and yank a leg off or detach the breast with your bare hands. But here was an armored monster a hundred feet long with short legs a foot in diameter. Yet the black boys ripped and tore—and ate—the dragon until nothing but the inedibles were left in a stinking heap.

Suddenly, they moved in unison in my direction. I say moved but it was more like teleportation. One instant they were a hundred feet away—the next ten feet, arranged in a kind of semicircle before the mouth of the cave, regarding me with unblinking, expressionless great eyes.

There was no use to run, not when I was to them like a snail to a rabbit. It wasn't even any use to raise my blaster. Before I could get it into firing position they could simply vanish.

And I felt that, even if I could get back inside the lifeboat, it would offer small resistance to their combined and prodigious strength. I thought, irrelevantly, that one of these babies would be a good thing to have behind you in a barroom brawl.

So we remained still, examining each other. A short shrilling hurt my ears, then another and another. Evidently they communicated in this way.

They did nothing—I did nothing. Then I thought this was nonsense. We couldn't stay there forever. I had to put it to the test. If they wanted me they had me, no matter what I did. But if they didn't I had work to do.

I moved toward them a slow step at a time, making no threatening gesture. As I came forward they retreated. It was like a ballet. That should have been good enough for me but I had to make sure. I went on and they kept moving toward the edge.

They reached it and sort of slid over it, clinging to the sheer face by their suckers, their great eyes peering at me without expression.

That was enough. They wouldn't hurt me—now, at any rate. I turned my back on them and walked a few steps back toward the cave. Over my shoulder I saw them slide back onto the ledge and maintain their ten-foot distance.

I picked out a possible path up the cliff to the most likely boulder above the cave mouth. I struggled up, wishing for a few of those suction cup until I stood above the boulder. I shoved at it. It didn't budge. The Black and Hairy crew watched me.

I needed a pry, but even then I doubted if I could move that boulder. If it could withstand the storms here, it would take more force than I could muster to dislodge it.

Then I had my brain wave.

I went down to the ledge and almost ran to a fine big boulder that would block the entrance halfway at least. The Hairy kids watched me, gathering in a semicircle behind me as I shoved and grunted at the two-ton rock. I turned and faced them.

"I helped you," I said. "Now you help me. Move it from here—to there."

I pointed and their heads followed my gesture. But they didn't look at where I pointed, they looked at my finger. I tried again. Same result.

Their combined strength, I felt certain, could solve my problem. But how to get the idea over? And even if I could would they help? It was like trying to get a disinterested dog to chase and fetch a ball.

OH, they weren't disinterested, really. They watched every move I made. It was just that they either didn't get my meaning or didn't care.

I sat on a small boulder and frowned at them. I wasn't noticing their odor now, though I'd thought I'd never get used to it. Then I scanned the sky for movement and—their gaze followed mine! They turned as one and aped the swiveling of my head from one horizon to the other. Then they faced me again.

I tried that on them. I looked at the big boulder, so did they. I looked at the mouth of the cave, so did they. Back to the boulder, the cave, the boulder, the . . .

Two of them moved, then two more, then the final pair. Each fastened a pair of suckers to the boulder, and they lifted it as if it were a feather and set it on the exact spot my eyes had picked out. Then they came back into their semicircle and regarded me owlishly if such a term can be applied to such countenances.

I went through the head turning again and again and they blocked the entrance in less time than it takes to tell it, leaving only a narrow passageway. They formed the watchful half-circle. I was flabbergasted. What now?

Would they follow me back to the lifeboat? Would they demand entrance? Or would they watch in that half-circle of horror and wait?

Well, it mattered little. I couldn't stop them if they set their minds, if any, to some project. A lifeboat couldn't get into or out of the cave but *they* could.

So I said, "Thanks, kids," and went into the cave. There was nothing friendly in their expressions as they watched me go, nothing menacing, either. There was just nothing, period. But they didn't follow.

"Well, that's done," I said when I was inside. "Anything yet on the screen?"

Helen heaved a sigh. "I was so worried, Jake. No, nothing." She sniffed. "What's that awful smell?"

"Me. You get that way out there." I decided to say nothing about the black gang. They might be an ace in the hole if they didn't decide to eat me. I shuddered, remembering the dragon. "How has our little pet behaved?"

"Harry? Oh, he tried once to get loose and gave up. After that, he just sneered.

"Shouldn't do that," I told him. "Ruins your good looks." He sneered.

"What do we do now?" Helen asked.

"Just sit here. Wish we had a good spool of microwire. At least we could read."

The screen sputtered once and then Carroll's anxious face filled it

"Jake! Come in, Jake, if you're getting this. Jake, oh, Jake!"

I leaped to the transmitter switch, buttoned it. "What took you so long?" I asked.

"Whew!" He blew out a breath of relief. "I had a hunch you were making for here. Where are you?"

"Can't you get a fix?"

"Pat's doing it now. We're on the night side. Where are you, in relation to that?"

I thought. Yes, shadows had been growing longer out there. "I think we're just about at twilight. But watch out for sudden storms. When you're close let me know and I'll guide you. How'd you get away?"

"Well, when Clayborne came back with only one lifeboat I figured you'd flummoxed him. And if you had you must have rigged up some kind of a drive. I couldn't think of any place else you could head for. How'd you do it, compressed air again?" He smiled gently.

I told him about the sand. His face was thoughtful. "We'll look into that, if we get a chance. Anyway, when he took off in his cruiser toward the asteroids, we played a hunch and struck out for here. We thought it would take too long to go to the Center and notify the Patrol. It looked like Clayborne was going to search the asteroids to make sure you weren't still there—"

"Or to hunt for Phamign's laboratory," I cut in.

"Yes, maybe that. But now you can come aboard and we'll decide what to do next. Captain Wall all right?"

"Cracked rib. Otherwise okay."

"We're in the twilight zone now, Jake, headed straight for you. Pat says we should be close enough to see you."

"Keep an eye out for a wide, bare plain, with sheer cliffs at one edge. There's a ledge of rock and on it in a half-circle you *may* see—"

"Shut off your transmitter!" Carroll snapped. "Here comes Junior."

The screen blanked out.

CHAPTER VIII

Remember? Atmosphere?

THAT was a pretty kettle of fission, if I ever saw one. Seemed as if, for a minute, we were going to be able to get out of our hole in the wall—and now it seemed as if it had fallen in on us. I showed Helen a long face.

"I'm about ready to give up."

"*Jake!*" she chided. "No spit and string left?"

Harry sneered. Smugly.

"We're like mice," I told Helen. "Quivering in a borrowed hole while a ferret noses around. No provisions. And even if the ferret doesn't find us we don't dare go out. Nor does the rescue party dare to reveal our hiding place. So we either starve to death or get eaten if found."

We sat in glum silence. I tried to think furiously, brilliantly, but my brain machinery achieved only a labored clanking. I tried to line up all the factors into two classes, assets and liabilities. Assets—we were alive, well-hidden, and —and—and what? I didn't bother with the liabilities.

The cruiser and the *Dolphin*, for that matter, could ride out one of those tremendous storms without too much difficulty or could shoot outside atmosphere and wait it out. No life raft could. We'd just hit the tail end of one and it had almost killed me.

Between storms, Junior could look for us. He'd find us, eventually, or our emaciated corpses. Then all he had to do was knock off the *Dolphin*, and go back to the asteroids to hunt for Phamign's laboratory at his leisure.

Phamign? The formula for founding herculium? Why, that was the sole cause of this mess. If . . .

I flipped on the transmitter, activated the screen. "Carroll!" I called urgently. "Come in, Carroll!"

"Jake, are you cra—" Helen began but Carroll cut her off.

His big gentle face was worried. "Are

you crazy?" he finished for her. "Clayborne can get a fix on you. Shut it off, Jake!"

"No, listen, Carroll. I've got the formula. You've got a pretty good idea where I am but Junior has to work out some angles. Come a-running, Carroll! You can beat him here and we'll come aboard. The laboratory was n this cave.

"Now listen carefully, chum. It won't look like a cave, because the entrance has been covered with huge boulders, some must weigh a couple of tons or more. How much does a lifeboat weigh?"

"Huh?"

"How much?" I snapped.

"Why, fifteen hundred pounds or so, I guess. Why?"

"Never mind. Just listen. There's a wide ledge in front of this cave, plenty of room to land a lifeboat if you're careful. You pick the place, land and open the lock. We'll rush out. Then we can make a run for it."

"Jake, you must be nuts," Carroll said gravely. "We can't outrun that cruiser."

"You forget the sand," I said. "I can make the conversion in ten minutes. Then he'll never catch us. That's all for now."

I cut out, breathing, I must confess, a little hard.

"Jake," Helen asked with concern, "are you all right?"

"We'll find out soon," I said. I kissed her swiftly and went out.

They were there on the ledge, my black and hairy chums, and as I stepped behind a boulder so I could see the plain and not be seen, they formed their half-circle at regulation distance. That was all I wanted to know. I ran back to the lifeboat, turned on the screen.

Oliver Clayborne's face filled it. But it wasn't the blue-eyed, boyish and hearty executive of Solar System Salvage I had seen last. His face was drawn, his mouth grim, his voice grimmer.

"And this time," he was saying, "you won't get away. I've got you located, thanks to your specific instructions to Carroll, and it just so happens that I'm between you and the *Dolphin*. So you're cut off. But I'll make a deal with you, Jake.

"I want that formula, and as you well know I can't destroy you and everything around you, because that would also destroy the formula. I hope you're hearing this, Jake. Come in, if you are."

I turned on the transmitter long enough to make a comment that required only the use of the lips and a vibrating tongue.

"All right," he snarled, "if you want it the hard way. But you haven't a chance. Why sacrifice yourself and Helen, not to mention your ship and all personnel? If you'll turn the formula over to me and sign a paper I'll draw up you can go free. This is your last chance. What do you say?"

At the risk of being monotonous I gave him the same reply.

I didn't wait for his reaction. I left the screen on, "For entertainment," I told Helen and ran back to my point of vantage. My pals took up their stations.

I scanned the sky, which was growing darker, and the black gang followed my gaze. Right, left, our heads moved slowly in unison. Then, far off and dead ahead, a dot grew and a faint roar. The cruiser streaked far overhead, was back in a few moments, circled over the plain and zoomed down to a landing, standing like a landmark some five miles across the dark blue plain.

They must have had the lifeboat loaded and ready, for the cruiser had barely settled on her flaring tail when it swooped out of the lock and headed straight for the cave. The Black and Hairys watched without expression.

WHOEVER piloted that lifeboat did a good job and set it gently on the ledge. I waited until the drive had been cut off and got the black gang's attention. I looked at the lifeboat, then over the edge of the cliff. I did this twice more before they got the idea, and they swarmed toward it just as the lock opened and the first of the landing party stuck his head out.

I couldn't see blood drain from his

face in that dim blue light. But his scream of pure horror and the slamming of the lock were pleasant sounds. fading as the Black and Hairys picked up the boat and flung it over the 500-foot cliff.

I didn't wait to hear the crash. I attracted their attention again and indicated the boulders blocking the cave entrance. As they made short work of these, the sound of the crash exploded in the still air and I made headlong for our lifeboat. I jumped into the pilot's chair, kicked in the drive and began to jockey the boat out of the cave. Some character I'd never seen before was gabbling on the screen:

"Mr. Clayborne, Mr. Clayborne! Are you all right? What in heaven's name happened? Answer me, Mr. Clayborne!"

I was outside now. I turned in a half circle and gave it enough power to get into flight.

"Strap in," I warned Helen. "I'll take it easy, but we haven't too much time."

Below, at the base of the cliff, I could see a confusion of figures milling around a lifeboat that would never fly again.

The face in the screen continued to gabble. I cut in my transmitter. "Your landing party missed the ledge," I told it. "They're injured, maybe dead. Better send help."

He blanked out, and I called Carroll. "Coming aboard," I said. "I'll hold my present course. Intercept me and open the lock."

"Jake," Carroll said sadly. "Remember? Atmosphere?"

I stared blankly, then it hit me. "Oh, blast. I'd forgotten. Let me think."

That just shows you what habit patterns will do. I was so much more at home in Space with no gravity to worry about that I had assumed as a matter of course that we could go aboard here as easily, say, as back among the asteroids, where all you had to do was match the mother ship's course and speed and move through the lock like a feather.

But you had to use belly jets to land in gravity and you had to move at considerable speeds to keep aloft. I could smash us, and the *Dolphin* too for that matter. So it was either land and transfer, taking up precious time, or rendezvous in Space.

Fuel was the main consideration. If my computations back on the asteroid had been correct we had little more than enough to reach Corfus. Was there enough left to pull out of the atmosphere? I had to find out.

I didn't dare let Harry loose to pilot the boat, nor could I trust him to check. And putting the boat on automatics in atmosphere was tricky business. Suppose I did cut in the automatics and checked the fuel supply. What if the fuel gave out while I was checking it, fifty feet from the controls? We'd plunge to certain death.

No, it was Helen or nobody. I turned toward her. "Can you make it over here under your own steam and take the controls? I want to check our fuel."

"Sure," she said cheerfully and unstrapped.

She caught her breath as she sat up and her teeth set her lower lip to bleeding again. She inched herself down to the deck and tears came into her eyes.

"I know you've taken a terrific beating, baby," I said. "But you've got to do it."

"Don't worry," she gasped.

She poised herself, and made a quick run for it. She grabbed the pilot's chair and clung, white-faced and swaying. I slipped out of the chair and she slid into it.

"Good gal," I said to her. To Carroll—"Hold everything."

As I went aft she said weakly, "Hello, Carroll. Having fine time, wish we were there."

A quick look at the gauges told me we didn't dare risk anything but a landing. That meant lost time for us and I could be sure Junior would use it to the fullest advantage.

I returned and told Carroll. "Have you got us in sight?"

"Sure—for the last five minutes."

"Follow us down then. Can you land it?" I asked Helen.

"I'd better not try, Jake. But I'm not

getting back into that bunk. I'm going to sit on the floor. Don't crash if you can help it."

"Tell Pat to land as close as possible, Carroll, and come running to help us. Looks like we might really be in a mess this time."

CHAPTER IX

I Don't Like Murder

I HAD noticed, in passing, that Helen had left the blaster on her bunk when she essayed the trip to the pilot's chair. I paid little attention to it. Harry was wrapped up, tied almost in a double-bow knot.

I soon learned now wrong I was.

I learned it the hard way, with the muzzle of the blaster against the back of my neck and Harry's saw-toothed voice in my ear.

"Just don't do anything wrong," he cautioned. "Set it down easy. Here's where I get even on my whole life."

He had got loose, I thought stupidly. It was a wasted thought. It was obvious that he had wriggled out of the cord but I used up several minutes wondering how, as if it mattered. Helen turned to look at him, and the pressure went away from my neck as he swung the blaster at her.

"What can you hope to gain?" I asked, finally, after everything had soaked into my thick skull.

"Shut up!" he said softly. "Do what I say."

"You know what you're going to run into—" I began but he cut me off.

"I listened once to your fairy stories, he snarled. "Shut up!"

Who was I to argue against those odds?

I landed on a wide, level plain and cut off the drive.

Harry motioned to us.

"On your feet, Cutie," he said to Helen. "Go ahead of me, both of you."

We obeyed, went through the lock and stepped to the ground as the *Dolphin* settled tail first about fifty feet away with a gentleness that wouldn't have broken an egg shell. Some pilot, that Pat.

Carroll came down the gangway and loped across the twilit plain. Harry waited until he was close before he showed the blaster.

"Stand still!" he growled.

Carroll did so, his gentle face puzzled. "How come?" he asked me reproachfully.

"I forgot to tell you," I said. "Hitchhiker."

"What comes next?" Carroll asked.

"Whatever I say!" Harry snapped.

Suddenly, without previous indication, a half-circle of the Black and Hairys formed behind Harry ten feet away. I couldn't tell whether they were my friends from the ledge or not but there were six and I had a hunch they were the same.

Helen shuddered and clung to me and even Carroll gasped. I pulled Helen closer, muttered to her and Carroll, "They won't hurt you—I hope."

Harry, with his back to the owl-eyed gallery, frowned. "Whatcha tryin' to do?" he demanded.

"Nothing," I said. "I'm glad you're between us and—them." I nodded behind him.

"Yeah?" he jeered. "Tryin' to get me to turn my head so's you can jump me? Well, it won't work, Mr.—"

He must have caught a sense of alien form from the corner of his eye for he suddenly jerked his head around and froze. That was our chance to disarm him, but I was too interested in what would happen next and Carroll seemed too lost in contemplation of the magical appearance of the things.

So we just watched to see what would happen next.

For something like ten seconds, Harry was rigid. It was too dark to see whether his face and lips were white or not, but the set of his shoulders indicated it. He stared and no doubt thought of the story I had told him of ancient evil out of the lost and forgotten past, of rites practised by the light of a full and baleful moon.

HE voiced a cry. It was a choking cry, composed of all the latent fears of mankind for the unknown and unsuspected. Such a cry was no doubt voiced by some early man when first faced by the sabertooth or the Tyrannosaurus. A cry of fear that went back to cave-life, to all-fours perambulation.

He threw the blaster wildly and gave voice again to incoherent horror and disgust. He turned, eyes white with fear, and ran toward the *Dolphin*. He stumbled up the gangway, muttering and whimpering, vanished inside.

I handed Helen to Carroll. "Don't worry," I said. "This is the Murchison fan club, first one on Corfus."

I walked toward them. I wanted that blaster. They fell back as I approached, maintaining that constant distance. I picked up the blaster, and went into the lifeboat. I smashed the converters with a hammer and came out.

My fan club was waiting, as were Carroll and Helen but only the last two followed me aboard the *Dolphin*.

Cap shook hands with me, with Helen. "Glad to have you aboard," he said dryly. "What was that that came aboard and crawled into a locker?"

Pat grinned as he kicked in the drive. He didn't have time to shake hands. We got into acceleration bunks, and I related our adventures to date as we took off.

"Where to?" Pat asked.

"Back to the asteroids," I said.

"Why?" Carroll asked. "You've got the formula."

"I have not. That was a what-do-you-say, a ruse."

"You're the luckiest guy in the System, Jake," he observed.

I looked at Helen. Her eyes had the old sparkle back. Her mouth, aside from being a trifle gnawed, was lush and red again.

"I'll say," I said, and she blushed.

"Well, listen," Pat said. "What say we knock that cruiser over? As soon as they get all the survivors aboard they're coming after us. But if we blow it over —and maybe I could do it with tail jets —they'd be delayed, maybe indefinitely."

I looked at Cap. He ran his hands through his silver hair and his blue eyes glazed with thought.

"It might cave in the hull so it would never fly again?" he suggested.

"Might," Pat agreed.

"Well, here's the way I feel," Cap said slowly. "I don't like murder, regardless of what the other guy wants to do with me. According to Jake's picture of the storms here, if we left a bunch of men helpless the next storm would kill anybody who survived the fall. I may be wrong, and if the majority of you vote to knock down that cruiser, I'll agree. What do you say?"

"Let's go," I said. "Back to the asteroids. Their last lifeboat is busted, and they've got a five-mile stretch to cover in bringing back that landing party or what's left of it But let's circle 'em once and take a look."

The others agreed and Pat flattened out. We saw—with infrared scanners—that the rescue party had barely reached the shambles at the foot of the cliff. That meant that we had several hours lead and we headed straight out of the atmosphere at full acceleration.

When we were in space I dragged Harry out of the locker where he was hiding. He was a broken reed.

"Agh!" he kept repeating, and retching at the same time. "No such thing. Jake said so—didn't believe him—agh!"

I slapped him a few times, and the emptiness of his black eyes was gradually replaced by awareness of his situation. He looked around the control room, taking in Pat, Cap and widening his eyes as he examined Carroll's gigantic shoulders.

"Where am I?" he asked.

I told him. "Go back to the galley, and get us something to eat and drink. One stupid move out of you, and I'll feed you to one of those things. We brought three aboard."

His face turned white again and he took off on the double.

"Let's have a conference," I said. "As soon as Junior knows where we're headed he'll tumble to the fact that I lied about the formula. But I think we can

hide from him. When we reach our spot we'll turn off all energy-using machinery so he can't get a fix on us with his finders and really make a search. This time you'll come with me, Carroll."

"I wasn't much help," Helen broke in ruefully.

"It isn't that," I said. "When the chips were down you came through swell. But if Junior finds us before we're finished, there may be trouble. He's willing and ready to wipe us all out and we've got to outsmart him since we can't outfight him Besides you've got a busted rib. But you can help. You'll wear a helmet while Carroll and I are out and keep us advised of anything important."

SHE smiled, and Carroll said, "That sand interests me, Jake. I think there's a hell of a—pardon, Captain Wall, ma'am—fortune in it. If we can manage the sand I say dump everything we can get along without and load it into the space."

"Sure, but first we look for the laboratory and I want to go to the center asteroid, the one that has all the caves on it."

Harry came out with a tray full of food and drink, which he passed around with palsied hands, spilling a little here and there. We ate, and Carroll and I decided to have a nap. I was about knocked out, and Carroll—even mighty Carroll—looked tired and worn

Cap woke us. "We're there," he said. "Everything's shut off except our scanners. We've no trace of Clayborne yet. The remaining lifeboat's ready."

Carroll and I got into suits, I waggled good-by to Helen, and we took the lifeboat through the lock, using the minimum necessary energy.

We landed beside our other lifeboat, the one I had crippled, and began a flashlight search of the cave entrances. Some of these extended as far as twenty feet, some were mere depressions in tortuous lava.

When we had covered everything in that area, we took the lifeboat around to the other side to where I had observed another bunch of caves.

We began our search, and after about an hour of careful backing and filling we found it.

It was deep inside a small-mouthed cave that widened out shortly past the entrance. The first thing we found was a locked door, a metal door that was as bright and shining as when it was hung 200 years ago. Coated with herculium, no doubt.

We made short work of the lock with hammer and chisel, and were inside the spick-and-span laboratory. It was a regulation room with a front and back door, tile where tile was needed, a desk, also coated with herculium, but not locked. Neat files of papers, books and notebooks. Everything was in first-class condition.

"This is it," I said more for Helen's benefit than Carroll's.

"Jake," she whispered. "Have you found it?"

"The laboratory, yes. The notes, no. We're looking. Anything doing by you?"

"Nothing. Cap and Pat are hanging over my shoulder, trying to make sense of my excitement. I'll have to take the helmet off to tell them. Back in a minute."

Presently, as we examined one document after another, her voice sounded in my talker.

"I'm back. Find it yet?"

"No, not— Wait a minute, Carroll seems to have something. That it, Carroll?"

He didn't answer for a few seconds. He rapidly skimmed page after page of a notebook, finally nodded.

"This is it. I guess we can go now."

A new voice broke in. "I wouldn't, boys, if I were you." It was the voice of Oliver Clayborne.

"Oh, Jake!" Helen said, aghast. "While we weren't watching, Harry turned on the transmitter. That's guided them here. Pat just knocked him down but—"

"Everybody just take it easy," Junior's voice warned. "I want that formula. We're at the mouth of your cave, Murchison, Carroll. Will you come out, or do we come in after you?"

CHAPTER X

Just Toss 'Em This Way

WE couldn't tell, of course, whether he was at the mouth of our cave or not but the chances were that he was. He could have watched us leave Corfus and probably figured we were headed for the Astrogation Center. But the asteroids were en route and his detectors could easily have picked up the transmitter beam.

It would have been simple to jockey a ship even as big as the cruiser into a landing here, where there was no gravity. And if he had had to use a little energy in spurts, nobody aboard the *Dolphin* would have noticed it, intent as they were on me and Carroll.

But while this was runninng through my mind and Carroll's too, no doubt, we were busy. We used gestures to communicate. First, one for quiet; then what to do with the furniture. Carroll set the big desk against the door with the broken lock and I shoved filing cabinets at him.

We laid these end to end until they reached across the room to the opposite wall, and we wedged them with smaller stuff.

"Well?" Junior's voice demanded just as we finished.

"I guess you'll have to come after us," I said, "but you'll need more men."

He was scornful. "There are eighteen of us."

"Really? That many survivors?"

"And even if some of us are bunged up we can take you and Carroll. You might as well give up, Jake."

"Another last chance?" I asked.

"No. You already had that," he said quietly, grimly. "This is it. But it will be considerably easier on you if you come out with your hands up."

Carroll and I moved to the other door. "I'd rather sleep on it," I said. "I think I'll take a nap."

Clayborne snarled, "Always a wise cracker!" as we opened the back door. We looked down a narrow, twisting passage and went along it single-file.

"It's perfectly safe, Clayborne," I said as we followed the turnings of the passage. "You can't force your way in. So I'm going to sleep until the Space Patrol arrives."

He barked. I think it was intended to be a laugh of scorn but it was just a bark. "I haven't figured out everything you've done yet, Jake, but I know this is just another trick. Maybe you're right and I can't get in the lab but I can wait until you starve. And if the *Dolphin* takes off my standby crew has orders to blow it into nothing but dust."

"You forget," I lied, "our souped-up fuel and the other lifeboat. It's halfway to the Center by now."

"I've learned not to believe anything you say, Murchison. And I don't believe that. I have a great respect for your ability to wiggle out of tough spots. But the only reason you've wiggled out so far is because you talked us into taking chances. I'm not taking any more. I don't have to. I can afford to wait and you can't."

"It's your funeral," I said, as the mouth of the passageway showed stars a few feet ahead. We approached this an inch at a time and I had the blaster ready. If Junior had suspected another entrance and had posted a guard, it was going to be too bad for the guard. We poked our heads out like scared mice and looked around. We could see nothing in the starlit darkness.

"You really want this formula, Clayborne?" I asked as we stood in indecision.

I suppose his reply was a snort. It didn't translate very well into sound.

"There's nothing," I pointed out, "to stop me from tearing it up."

"Phooey! You wouldn't do it. Not the altruistic, idealistic Jake Murchison."

"I might to save my life."

"How would that save it?" He sounded as if he wanted to know, and his apparent puzzlement gave me more cold chills than any threat he could have made. It was perfectly clear for the first time that he was determined to kill us.

"You'd have nothing to gain by killing us if you couldn't get the formula," I said. "You'd have spent all this time and money, not to mention casualties in your party, for nothing."

"Jake, don't you realize I've gone too far to stop? If you'd taken my other offers there wouldn't have been any need for killing. But I won't trust you on oath or over your witnessed signature, so the answer is obvious. No, you're going to die whatever happens. You can make it fast and simple or slow and painful."

"Give me a few minutes to think it over," I asked.

"Sure. Take all the time you want. We've got the door spotlighted. I don't care what you do. You can come out or stay in. The result will be the same, in the end."

CARROLL motioned and I followed him even though I couldn't see much point in it. Still, we wouldn't achieve anything by standing in the mouth of that cave.

"What do you think of his proposition, Carroll?" I asked as if we were in conference in the laboratory.

Carroll took his cue. "We're doing all right so far, Jake. We can't lose anything by continuing along our present line."

"He's capable of raising new problems," I said.

"Then we'll deal with 'em when they pop up. You know the old saying, if you can't go one way, you'll have to go another."

I still didn't know what Carroll had in mind though I should have guessed, knowing his faculty for going directly to the root of any matter.

I puzzled it over as we skirted the pile of lava spires and mounds. He was leading us across the uneven surface directly away from the cave mouth which led into the laboratory and where Junior's gang were presumably waiting. So we weren't going to try to take them from the rear. That would be suicide anyway —two men and one blaster against nearly twenty armed killers with an armed and mobile ship standing by.

It would also be foolish to try to reach our lifeboat. They would have posted a guard there. Furthermore it would be the height of idiocy to— Or would it?

We reached the end of the escarpment at that point and halted. Carroll examined the wide plain before us, and pointed to where a hulking shape was silhouetted in a long curve against the stars. He walked more rapidly now, directly toward it with no attempt at concealment.

I gave a silent cheer for his strategy. Even if we should be observed from the cruiser nobody would expect an approaching pair to be us. We were supposed to be cornered.

I decided to heighten the illusion. "Clayborne?"

"Yeah, Jake? Made up your mind?"

"Not quite. Here's another proposition. If I should memorize this formula and then tear it up, you'd be faced with a problem. Your only chance to get it would be in keeping me alive. If I guaranteed to give it to you after we arrived back in civilization—"

"Go right ahead," he said cheerfully. "If that's the way you want it. Sure, I'd keep you alive—just long enough. No man can stand—indefinitely that is—constant and scientific torture. It might even be an interesting experiment to see how long you'd last."

"You're a pleasant character."

"Believe me, Jake," he said earnestly, "I regret this. I really do. I don't want to eliminate all you people but it's my only out. Come on, why prolong it?"

"While there's life," I said.

"But surely you haven't any hope of getting out of this one?" he asked. "You can't. I hold all the cards."

I sighed, trying to put defeat into it as we reached the cruiser. "I guess so. Suppose, then, I come out alone and deliver the formula intact. Will you let the others go?"

"Certainly," he said promptly. Too promptly.

"I'll have to think it over some more then. This is an important decision." I added wryly, "My whole career may depend on it."

Junior chuckled as Carroll buttoned the lock open and we jumped inside. "Always good for a gag," he said.

We pressurized the lock. Carroll gave me the blaster and motioned me to lead the way into the corridor. On the theory, no doubt, that somebody my size would be more likely to be a member of Clayborne's party than somebody seven feet tall.

It was just as well for a short swarthy character was coming aft from the control room just as I stepped through the door. He eyed me with idle curiosity and kept coming. I laid the blaster alongside his head and Carroll caught him as he fell, took his blaster and shoved the man into the lock.

Carroll motioned for me to start talking again and to follow him forward.

THIS was a neat trick, to make idle chit chat while we sneaked toward the control room, where we might meet —anything. I went blank. I couldn't think of anything to say except, "Good morning." But I forced myself to relax and had a stab at it.

"You must know, Clayborne, that you've got too many in on the deal. Twenty-odd men, pirates and murderers. Eventually, one of 'em will get drunk and blow his top. Then it's curtains for you, anyway."

"I think not," he said easily.

"Oh, I see. You're going to dump them out in space to starve or freeze. Yes, that's a good way, all right."

This got confused murmurs but Junior's voice cut through them. "Don't listen to him, men! You know he's a liar and a trickster."

"Maybe so," I said, "but I draw the line at mass murder. If you men will capture your boss and throw in with me I'll see that nothing happens to you."

There was a short tense silence as we reached the control room. Three men stood over the chart table with their backs to us. One wore a helmet and was apparently writing our conversation for the others.

"What about it, men?" I said as Carroll tiptoed toward the trio. "He'll dump you, once he's got what he wants. Then there'll be no witnesses."

"Oh, for heaven's sake!" Junior said in a bored voice. "I cleared with the port authorities at Arcton City. I can't go back minus twenty men."

"Yeah, how about that?" a voice asked.

"That's right," another said, as Carroll yanked the writer's helmet off and slugged him.

The eyes of the remaining pair popped out as if a ghost had appeared and they reached for their blasters. But their hands froze as I covered them with mine and Carroll disarmed them. He motioned them to lie face down on the floor, warned me with a gesture to keep an eye on the corridor as well as the captives and went to the pilot's seat.

He gentled the ship away from the asteroid for a mile or so and gave me a smile of triumph as a new voice sounded in my talker—Helen's.

Not Helen, exactly but Space Captain Helen Wall, and her tone was that of habitual command—sharp, incisive, authoritative.

"Mr. Clayborne! I have you and your men covered. Put down your weapons and come out one at a time with your hands up. Jake cover them from the rear."

My mouth dropped open. A sudden, unidentifiable grunting and deep breathing was loud in our helmets. This turned into a male exclamation of triumph.

"Got her, boss. She was bluffin'. She ain't armed."

I groaned. "What have you done, Helen?"

"Let me go!" she said. "I can't get away. Oh, Jake, I talked Cap and Pat into landing me. I thought if I created a diversion, you'd be able to make a break for it. Only you didn't. Why? If you'd acted fast, we might have pulled it off."

"Why did you let her, Cap?" I asked.

"We had to try something, Jake. Why didn't you take your cue?"

"You should've known we'd get away."

Fine fancy words. If there was de-

spair in them because of Helen, there was also smug triumph. Murchison and Carroll, the unbeatable. I tasted the sweetness of the thought.

It turned to gall in my mouth as Junior quietly said, "Now." Four locker doors opened simultaneously around the wall of the control, four blasters looked down our throats, four men in helmets eyed us with unwavering determination. We had no chance even to move one of our captured weapons."

"Just toss 'em this way, boys," one of the men said. "Now!"

There was nothing else to do so we did it. The blasters turned lazily in flight, were caught by our late captives.

"Okay, Chief," the speaker said. "We got 'em."

"Then come and get us," Junior said. "But watch them. They're tricky. Jake," he went on, "you didn't really think I'd let you pull that gag twice, did you?"

CHAPTER XI

Hang On!

CLAYBORNE was his old boyish self again with pleased blue eyes and a salesman's smile as he skimmed through the note book he had taken from Carroll. The three of us, still in our suits, stood together against a bulkhead under a dozen or more steady weapons.

The men came in, two and three at a time, wearing helmets only. Their boss had told us to stay in our suits without explaining why but the ship's company, including himself, had put theirs away except for helmets.

"You don't have to wear helmets," he said cheerfully, "but we're going into a little conference and if you're interested you can listen in."

This got a small cheer, and it was a gay bunch who stood around and watched us as Junior finished examining Phamign's notes. He raised his head and exposed his teeth heartily.

"That's fine," he said. "Seems to be complete enough. Now for you three." He looked as friendly as a wealthy man's heir. "I had you keep your suits on, because I thought you'd like to go back to your lifeboat.

"It's been pleasant, though you had me worried at times, Jake. I'm curious to know how you managed to dump that lifeboat over the cliffs on Corfus. We must talk it over some time in Arcton City."

"What's all this double talk?" I asked.

"No double talk, old boy. You're free to go. I have no further interest in you. Oh, one thing." He snapped his fingers. "I want a bill of sale for these notes first. I'll draw it up."

It still didn't sink in and the expressions of Carroll and Helen mirrored my confusion. Free to go? No further interest? Bill of sale?

"Do it over again," I said. "In simple language."

He spread his hands, shrugged shoulders almost as wide as Carroll's. "What could be more simple? I came out after the formula, I have it. I want to buy it from you. I believe the phrase is, 'In hand received and other valuable considerations.' Fair enough?"

"And then you'll knock us off, I suppose?"

"Jake, Jake!" he chided. "Do you think I'm fool enough to commit murder?"

"Why not? You've committed almost every other crime in the calendar,"

"Name one," he challenged.

"Attempted kidnaping of Helen on Arcton, attempted murder, carrying illegal armament, among others."

He chuckled. "Let's take those one at a time. We didn't attempt to kidnap Helen. We simply propagandized her. Even her suspension was part of that. We felt that if we could get her agitated enough she'd run for you. We didn't know where you were or where you were going."

I looked at Helen. She frowned for a moment, then shrugged. "I couldn't prove otherwise, Jake. I still think they were going to grab me but—"

"Two," Junior said. "Attempted murder? Whom have I tried to murder?"

I thought this over. I might build up a

circumstantial case but I had to admit nobody had actually fired at me.

"All right," I said, "what about that disintegrator?"

He waved his hand toward the controlling mechanism. "Take a look. It's a dummy."

I took a look, a good one. It was a dummy, all right. I turned around to face him and what I felt must have been in my eyes.

He chuckled again. "Do you think you're the only one who can run a bluff, Murchison? I simply adopted your tactics, that's all, only I made you believe I was deadly serious. That gave me a big advantage because I stopped believing you after you managed to capture the first lifeboat. I just put myself in your place and tried to figure what you would do. It was simple."

I LOOKED around the circle of grinning faces, faces of thugs and, no doubt, former pirates. If those men hadn't been prepared to kill me and Helen, then I knew absolutely nothing about human nature. Clayborne was lying but, as he said, how to prove it?

"All your men are armed," I said, feeling the triviality of the charge as compared with the others, "and we're being held here under threat of death. Do you deny that?"

"Not at all," he said easily. "We've captured a couple of pirates and their accomplice. Do you deny that you and Carroll sneaked aboard and tried to steal my ship? As for the weapons themselves we have permits—to do some exploring on Corfus." He gave me his genial smile. "Even you can't deny that we did explore Corfus to some extent."

"Well," I said. "It looks as if you've got us where the hair is shortest. But don't think you're fooling me. Ever since we salvaged that cargo of herculium you've violated every fair business practice in the book to stop us from cashing in on it. And now you steal the formula and thereby increase the monopoly of Solar System Salvage."

"You can't prove anything illegal, Jake, and your signature on the bill of sale will add the last lawful touch."

"Suppose I refuse?"

His eyes took on a glint. He looked at Helen, but spoke to me. "You won't, I think."

His meaning was perfectly clear, and I looked around in a distracted way. There was no move we could make, unarmed, outnumbered seven to one. If only—

The thing hit me like a meteor and I shifted my eyes away from the master control panel, almost within reach from where I stood after examining the dummy disintegrator. I held my gaze on the floor, thinking it over, calculating the odds, estimating the risks.

I decided to gamble. I jumped, grabbed the switch which would instantly blow the ship free of air and expose all non-spacesuited bodies to an absolute vacuum.

"You can kill me," I said, "but when I fall I'll pull this switch."

All eyes swung to my hand. Those men, pirates, thugs, murderers, had seen what happened when unprotected bodies were flung suddenly into deep Space.

Pandemonium broke loose.

They dropped their weapons anywhere and plunged for the corridor and lockers. Their grunts, cries, sobs and curses were thunder in my helmet. Clayborne's voice cut sharply through the din.

"Don't believe him! He won't do it! He doesn't dare!"

It is doubtful if they even heard him. But he had no chance to say more for Carroll was in motion as soon as the men were. He dove at Junior, wrenched the blaster away and flung him against a far bulkhead. Then Carroll fastened the sliding door to the corridor as Helen got into motion.

She darted to the pilot's chair and kicked in the drive. "Hang on!" she called.

Carroll and I grabbed a railing, and she took off at high acceleration that almost pulled my arms loose and plastered Junior helpless against the bulkhead. I couldn't see the crew in the corridor, of course, but we learned later that the

acceleration flung them aft in a welter of arms and legs, some broken.

Helen cut the drive, and I slipped out of my suit.

"Thanks for the privilege, Carroll," I said in my helmet a. I dove at Junior. "This is for everything," I growled, and swung a hard right to the stomach.

I had left the helmet on in the interests of time, but it was good that I did, for I have a glass jaw. Any number of persons have knocked me out with a short jab to my chin, and I didn't know whether or not I was as vulnerable elsewhere.

I soon found out. Junior kicked himself away from the bulkhead and we floated along the starboard beam to crash against a bunk, with me acting as a cushion for his mass.

I went to work on his wind, noting from the corner of my eye that Carroll was idly twirling a blaster, watching with interest.

HE caught me under the heart with a roundhouse that would have put me out of commission ordinarily but I was moving through a kind of furious haze and it only buckled my knees.

I lashed back, left, right, left, right and kicked myself away from the bunk. This time Junior was the cushion, and I hammered at him. He suddenly folded, leaning at a crumpled angle, jaw hanging, eyes rolled up.

I stepped back. "That was quick," I said in wonder.

"If you'd always remember to cover your chin, Jake," Carroll said, "you'd be a good man in a brawl."

"I guess it's his executive's muscles," I said.

"We might as well get out of these helmets," Helen said. "What next?"

We took off the helmets. "Watch Junior," I said to Carroll, who was methodically gathering up dropped blasters. I turned on the transmitter and called Cap.

His anxious face filled the screen. "Everything all right, Jake?"

"Well, better than we expected five minutes ago. But we've still got to land in an atmosphere. We've got everybody but Clayborne locked out, and I don't know what that merry crew will dream up. Are any of 'em armed?" I asked Carroll.

"Six or seven, according to my count."

"Then here's what you'd better do, Cap," I said. "You take off for Arcton City and get a Space Patrol to meet us there. We'll just loaf along and give you plenty of time."

"Anybody going to make any charges?"

I explained how it was a stalemate. Permits for blasters, the dummy disintegrator, and how we couldn't prove that an actual crime had been committed. "But I've got the formula," I concluded. "Clayborne thinks he can lodge a piracy charge against me and Carroll.

"But don't forget that the last job we did was for the Space Patrol, and they know the background of this whole business already. My guess is that Colonel Hardy will hold the crew for disturbing the peace at the landing on Arcton City, but I'll just leave it all up to him."

Junior straightened up and took off his helmet. Carroll negligently pointed his blaster.

"Okay, Jake," Cap replied. "Anything else?"

"Yes, Cap," Helen suddenly spoke up. "Brush up on the marriage service, will you, please? And Carroll, of course, will be best man."

Carroll grinned at Junior. "After Jake's latest exhibition, I'll have to be satisfied with second best."

●

COMING NEXT ISSUE

THE WEARIEST RIVER

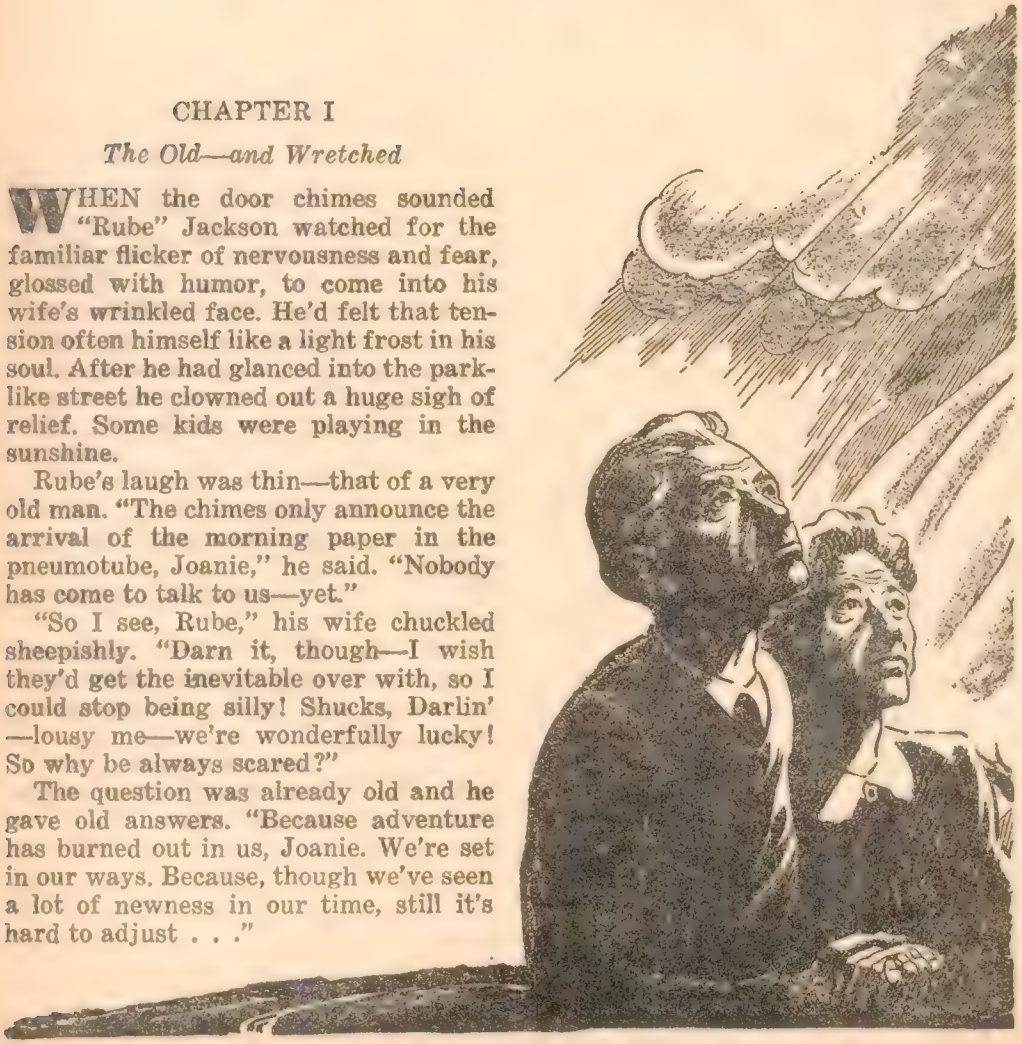
An Astonishing Novelet of Past and Future

By WALLACE WEST

a novelet by

RAYMOND Z. GALLUN

COFFINS TO MARS



CHAPTER I

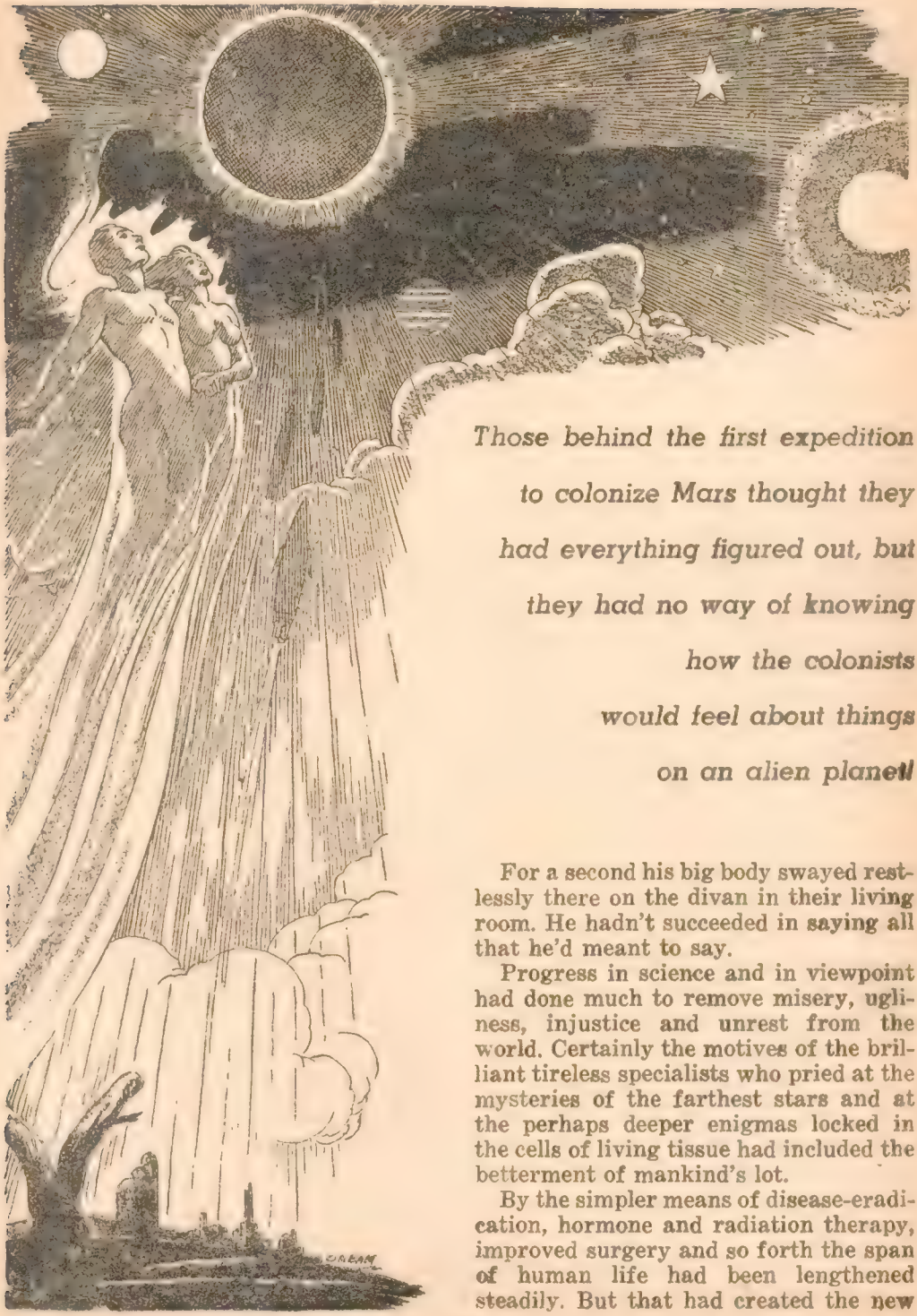
The Old—and Wretched

WHEN the door chimes sounded "Rube" Jackson watched for the familiar flicker of nervousness and fear, glossed with humor, to come into his wife's wrinkled face. He'd felt that tension often himself like a light frost in his soul. After he had glanced into the park-like street he clowned out a huge sigh of relief. Some kids were playing in the sunshine.

Rube's laugh was thin—that of a very old man. "The chimes only announce the arrival of the morning paper in the pneumotube, Joanie," he said. "Nobody has come to talk to us—yet."

"So I see, Rube," his wife chuckled sheepishly. "Darn it, though—I wish they'd get the inevitable over with, so I could stop being silly! Shucks, Darlin'—lousy me—we're wonderfully lucky! So why be always scared?"

The question was already old and he gave old answers. "Because adventure has burned out in us, Joanie. We're set in our ways. Because, though we've seen a lot of newness in our time, still it's hard to adjust . . ."



Those behind the first expedition to colonize Mars thought they had everything figured out, but they had no way of knowing how the colonists would feel about things on an alien planet!

For a second his big body swayed restlessly there on the divan in their living room. He hadn't succeeded in saying all that he'd meant to say.

Progress in science and in viewpoint had done much to remove misery, ugliness, injustice and unrest from the world. Certainly the motives of the brilliant tireless specialists who pried at the mysteries of the farthest stars and at the perhaps deeper enigmas locked in the cells of living tissue had included the betterment of mankind's lot.

By the simpler means of disease-eradication, hormone and radiation therapy, improved surgery and so forth the span of human life had been lengthened steadily. But that had created the new

problem of overcrowding and shortages.

Until a year ago, having reached a goal that was the culmination of a series of steps and the realization of a dream that was far older than its classic advocate, Ponce de Leon, the specialists had brought to the world a sullen and worried questioning, grim as war, which the International State had made obsolete. It smoldered mostly out of sight beneath the Utopian calm of planned living.

IT was the darker side of a miracle that could never be equaled again. It made Rube think of an ugly foreign word that belonged to his youth in World War II. Lebensraum. It was a question in itself. And even in a society whose philosophy was forced by democratic principle to remain benign the answers had to be, in some measure, harsh.

"Just newness, Rube?" Joan chuckled. "Unnaturalness, maybe. Making wills with no true death in prospect—unless it's by violence. Breach of biological custom. But the custom of babies being born goes on. What woman would ever want that stopped? It would stagnate life, darlin'. Agreed? Good! As for us, remember the cemetery monument we bought when you were a mere seventy-five? Moss-grown and futile now—and we're looking ahead, past the peaceful green grass. To youth again. To Lord knows what."

Joan's light humor helped bring Rube almost a sense of peace, bracing him against the chilly unknowns ahead about which, to be sure, he felt a certain eagerness, too. "So we'll take it easy, hon," he said. "Does it matter if the person or persons we're waiting for, come tomorrow or the day after? I missed the newscast. Shall we look at the paper?"

In spite of television, whose moving figures were now in color, three-dimensional and all but alive in the crystal globe of a receiver, there still were people who liked their news in print. Seated in their porch swing, Joan and Rube looked at the paper together.

SENATOR HUBERT, EUTHANASIA ADVOCATE, THREATENED WITH IMPEACHMENT . . . CENTENARIANS MORE NUMEROUS THIS YEAR BY SEVEN MILLION. MANY MUCH OLDER. . . . NEW SYNTHETIC PROCESS GIVES HOPE OF MORE FOOD . . . NEW ARTIFICIAL ISLANDS FLOATED IN PACIFIC. EACH TO FEED 50,000 . . . LAST GREENLAND GLACIERS MELTING UNDER WEATHER TOWERS. POPULATION ABSORPTION POSSIBILITIES MODERATE . . . INTER AGE GROUP RIOTS IN ST. LOUIS . . . COMPULSORY RESETTLEMENT LAW FOR REJUVENATED AGED UNLIKELY TO BE MODIFIED. . .

Rube and Joan paused over one heading:

CARL ROLAND'S "WILD SCHEME" WINS EXPERIMENTAL APPROVAL AGAINST OPPOSITION. AGED REGISTRANTS ALERTED.

Then, since by the laws of chance and the comparatively small numbers of people that would be involved they seemed safe, they looked on to another topic.

MORE VITA CAMPS NEARING COMPLETION. OLD TO BE PROCESSED IN KEEPING WITH DEMANDS. . . .

There was a picture of such a camp—hastily built like the old army camps. But the connection with something else in Rube's memory was even stronger. The dash across Germany. The pause at a murder factory. There was the same electrically charged barbed wire barrier. The same peaked towers that mounted weapons, pointing outward here.

That the purposes of these places was at antipodes from that of the Nazi extermination centers of a century ago, made strangely little difference of aspect or mood. Vital statistics are always somewhat grim. Over no treasure can men go so mad as the treasure of life.

Awareness of all this crawled deep in Rube Jackson's nerves. There was a sense of being useless and unwanted, and of having been paid in full in the coin of living, while others, who were younger, still waited their due. Justice was

all in favor of youth, when there was not room enough in civilized places. It wasn't only that Rube was just. He felt a guilty embarrassment. A person deserved only his century of possession.

He had voted that way himself. Then a person must start bare-handed in another place. Such justice gave reason to the compulsory renunciation of property and to the sealed trains speeding on to the vita camps, and then on into the night, silent and unlighted, to the dispersion centers.

In some of the latter it had been reported that great silvery ships would even point portentously spaceward, waiting. It was Carl Roland's scheme.

"Maybe they'll send us to Antarctica, Rube," Joan mused.

HE grinned back at her, seeking with belief, against the faint worry of an almost inconceivable unknown, for a future that was not too strange. "Maybe. It seems to have been turned into quite a nice place, with the aid of the atom. Beaches and everything—but let's talk about the old days, hon."

So their conversation retreated into that special land of the aged, where memories are golden and peaceful, and where even hardship takes on a certain humor and whimsy. To think back was a balm that could drug their tension and disorientation.

Their marriage in 1946. Joan had been slim, then; beautiful, blond, modern, athletic. . . . It was as though Rube could see her slender hand on the wheel of the first new car they had ever owned —long ago. Three children had been born to them. They had built this house, which was still theirs. The memories were golden all right but into them crept a little of the sadness of farewell.

Their light lunch was prepared automatically in their robot kitchen. After eating they dozed for a while in the sun. Jim, their youngest son, phoned, as he did every afternoon. Jim, who was seventy-five and looked scarcely fifty by old standards.

"Hello, Dad. How does it go? How's Mom?"

"Fine, Jim."

Jim's talk was brisk, gay, platitudinous, but with his constant concern for his parents lurking unspoken behind it.

Four p.m. found Rube and Joan driving in a rakish thing of glassite and blue plastic which was still called a car. In his pocket Rube carried a small tear-gas pistol. For in these times of unrest and prejudice c e r t a i n ill-advised youths, prone to violence, and thinking too much that their world was cluttered by those whose lives were lived, could do worse than just sneer with wolfish amusement.

For Rube and his wife the drive had its unmentioned purpose—review and good-by. To the years they remembered. To the things they knew best. To the small steel town that had become a great, sprawling city. Away from its center the towers of apartment houses loomed at spaced intervals in a parklike landscape.

Beyond were the "farms"—row on row of coiled plastic pipe in which foggy green water circulated, generating in tiny granules of plant substance, the materials from which food of various sorts could be synthesized. And there still were nooks of lush, primitive woods.

Far from home they sat on the grass and ate a picnic supper and looked at the weather-control tower, shedding its invisible emanations miles away. The stars came out unchanged. But silvery specks crept with visible speed across the firmament. Orbiters. Tiny artificial satellites, serving their many purposes —television-relay, weather-study, space-navigation.

The old moon was dotted with bluish specks—the lighted airdomes of the mines. On the moon, which had been inviolable in Rube's boyhood but which had been a source of metals, now, for thirty years. Young men had gone mad there.

It was the harsh bleakness, for which in the primitive emotions of mankind, conditioned through all the ages of their history to gentler circumstances, there often seemed no adjustment, no common ground. It was a little like trying to live in a sealed shell, sunk miles in the ocean

—with plenty of food and air, but in solitude and darkness.

Joan and Rube watched the wake of a spaceship, outward bound for the air-domes. A blue-white streak—atomic. Its temperature surpassed a million degrees. Most of its radiation must thus be invisible X-ray.

Rube felt the rhythm of the years, the incredible becoming the commonplace step by step, human emotions trying to keep pace.

Joan said quietly at his side, "Venus will set soon. And there, to the south, is Mars. . . ."

He knew that her thoughts paralleled his own, groping at their futures. Rube took no stock in premonitions. It was just that people had that nervous habit of worrying that the worst would happen.

Both Mars and Venus had been visited all of twenty years ago. Venus, to sunward, had exaggerated seasons and vast smothering winds. Life had not gone far there.

Mars was farther away—at its nearest a hundred and fifty times as distant as the moon. It was chilly, arid and senile, smaller than Earth but still vast. In its early youth an Earthman might perhaps have breathed and lived in its even-then rarefied atmosphere.

Once it had supported intelligent beings though they were not—and could not have been—human. Remaining was certain hardy plant life that changed the tints of the planet with its shifting seasons. A few adventurers had gone there, young, vigorous, foolhardy. Some had disappeared though there was a station, where men lived an artificial existence for the sake of science.

The average youth, though he might be intrigued, cared far less to go to Mars than similar boys might once have cared to visit the South Pole. Mars was far too distant to make the ordinary metals it could supply worth the transport.

Rube had seen some museum specimens from out there—a mass of black glass, which might have been part of a wall, fused down by some atomic weapon, ages ago—and some rusted scraps of machinery. Such things helped him little to make Mars seem less shadowy.

His mind seemed to stumble over the puzzling thought of how a man could cross inconceivable distance to mingle his physical self with the tiny blob of a dust storm as seen through a telescope, or with the little white button of a Martian polar cap that in reality was fifteen hundred miles across. His intellect accepted such ideas. But some primal logic in his guts denied their possibility. So he felt lost.

At last with an effort he shrugged off such ruminations, which probably did not concern him anyway. His thinking leaped back to a central fact which was hard to grasp too.

"The important thing, Joanie," he said aloud, "is that, barring accident, folks can go on living indefinitely." In that moment, it struck through his sluggish blood like a vast thrill.

CHAPTER II

Take-Off

THE next morning their visitor came. That it was a girl detracted nothing from the effect for she was of a type. It was not hard to find in her all the multiple and contrasting marks of the period. She was slender and nordic and she wore her trim uniform with a certain arrogance. Not altogether was she likable.

But she was benign, like the prevailing philosophy, which still had to make its compromises with reality, administering a great benefit to win the best good for the most people, with the least harm to the fewest. The pistol at her belt was clearly not just for melodramatic show, as evinced by the thin scar, not yet entirely faded out in her small chin, after plastic surgery had been applied.

It was not hard to imagine some hysterical individual, disturbed by a dictate regarding the next century of his future,

or of that of a loved one, attacking her senselessly with a knife—for the power her kind represented. Though she only carried out orders—she did not make them.

At the door she said: "Mr. and Mrs. Reuben Jackson? Vita registration numbers UF nineteen thousand two hundred and seventy-five and six?"

She spoke softly and with a good-humored smile but it was not hard to sense how her voice would show a steel edge through the velvet scabbard at the first sign of anger or confusion on the part of anyone with whom it was her job to deal.

Rube's throat felt stiff. "Yes," he said. "Good morning. Come in." He thought of the fateful registration card in his pocket.

The girl rechecked data obtained months ago, at the time of the compulsory listing for vita, of everyone over a hundred. Rube had been born in 1922 and was now 123 years old. Joan was two years younger. Rube looked at his big, gnarled hands, amused that, to the government, he still had a profession, "Metal worker and machinist."

The girl flashed him a bright smile. "Splendid!" she said. Then her fleshy eyelids lowered slightly and she launched into her explanatory talk, which sounded memorized.

". . . the property of those who consent to the vita processes, Mr. and Mrs. Jackson, goes to the heirs they designate, subject to inheritance tax. Those who decline retain their holdings until death and of course are not required to settle in frontier areas. Owing to the very large numbers of people now over a hundred refusal is final.

"Your cases are, however, somewhat unusual up to now—so you have a full week to decide. Registrant couples and single persons of the UF series, have been chosen by lottery for a radically new settling area, which may be considered objectionable. I refer to another planet— And to Dr. Carl Roland's plan."

The girl smiled again as if to lighten a blow. "Oh, it is not as bad as you think," she went on. "Dr. Roland's psychological tests prove that the old are emotionally more suited to such a venture than the young. They've had much more time to be experienced in hardship and change. They're more seasoned and calmer. Report your decision as soon as possible to the local office."

Rube glanced at Joan. It was almost coincidence that they had fallen into the small group chosen for Roland's experimental venture. But now Rube suspected that it was not so small as he had supposed.

Joan's faded eyes were calm. And Rube felt calmer than he had ever expected to be. Maybe his hunch had forewarned and braced him. Now too there was the relief from uncertainty.

After the girl had left they talked it over. "Nothing but vita can patch us up for much longer anyway, Rube," Joan said, smiling. "Our bodies are too old. Shall we, Rube?"

For a moment against that other awesome future he felt the call of an ancient kind of peace—of green grass in a neglected cemetery.

He laughed indulgently. "No, Joanie. When you have a chance for life you hang onto it."

It was their children and other descendants who were furious about their being included in the Roland scheme. Jim, their youngest son, raved and ranted.

"It's insane!" he yelled over the phone when Rube told him. "Roland is just a bookish, impractical theorist!" Jim sounded haggard. "Besides," he went on, "it'll be twenty-five years before the earth will be acutely overcrowded. And to another planet! They didn't even tell you *which* planet! How can they expect people who have been retired for years, who are used to sitting in rocking chairs on porches, to adjust to that?"

A LUMP formed in Rube's throat as he felt the desperation behind Jim's words. He was a type of son that was common today—worried about his parents tangling with the unknown. And now it was much worse. The distance was so great and the destination so

strange, that good-by would be like the good-by of death. With a thought like that affecting his own, a peaceable man could go for his gun. Rube became concerned for his boy.

Nonetheless he was feeling pretty good himself just then. A perhaps naive sort of confidence had come over him, an airiness—and it was mixed with a spark of humor. He wouldn't be occupying some young person's place in the world for much longer. His conscience was clear.

"Shut up, Jim." He chuckled with a faint edge of command in his tone. "I'd hate to see the pile of starving people, getting into each other's hair if no really good ideas for drawing off the surplus were put into effect for twenty-five years more.

"Legal appeals have been made, I understand, for change of resettlement area. But there'd be a stigma now. Your mother and I don't want to be called yellow. We've made up our minds and will take our chances. Maybe it'll be fun. And time is longer now. Some time we'll see you. Okay?"

It was a tough week for Joan and Rube to get through—especially for Joan. Their descendants came to the house, paid their respects and passed in review. They ranged down to tots—husky lads, and little girls looking very dainty in their bright colored dresses.

"And now I'm glad that *that's* over, darlin'. *Whew!*" Joan said on the second to the last day. She wiped away a womanly tear and grinned. "Now we can get ready."

Walking in the street alone that evening, Rube saw a young man of about twenty whose face was somehow familiar. "Hi, Jackson!" he said. "Remember me? I'm back from Greenland—special leave. Getting vitaed yourself soon? . . ."

Greenland! Envy hit Rube. And the bitterness of chance. This was no boy. This was an old schoolmate—an enemy then. Now, when they said good by, and passed out of each other's lives for good, Rube found that he did not even remember the man's name.

On the last day, Rube and Joan put their house in perfect order. Rube called a taxi at 10:30 p.m. To avoid possible outbursts of hysteria and violence, no relatives or friends were allowed to come to the station, where the train, which had already journeyed far and was almost loaded, brooded under the arches.

Guards, not too obviously armed with ionic pistols and tear-gas projectors, smiled at Rube and his wife and helped them board with the single small suitcases that each person was permitted to carry. At midnight the train began to move and then to tear. There were no more stops until, in the gray dawn, it glided into a siding within the barbed wire enclosure of a vita camp whose name Rube did not even know.

What followed was, in a way, familiar again from his remote past. There were curt orders, sharp and sometimes sarcastic evasion of questions, hours of waiting—not in line but in comfortable chairs—but the effect, against the mystery, was almost the same. There was no intentional unkindness.

"It has to be like this, Joanie," Rube said. "When you have to handle a lot of ornery people in a hurry. And there *is* hurry. Plenty of these old timers couldn't last more than a few months, without vita."

Everything worked in an assembly-line manner. Physical c h e c k u p s—psyching—some few who were considered emotionally unfit would be eliminated, to be routed to terrestrial resettlement areas.

Of grumbling, there was plenty. Strangers were thrown together in a strange situation. Some sought the reassurance of new friendships, and gabbled and questioned constantly. Some were painfully reserved. Stripped of their possessions, except for the skills in their heads and in their hands, all, however, seemed to have become more alike. Professional men and laborers, housewives, and women who had once served the machine age—they were all just scared human beings.

A little wizened man with a game leg kept up a flow of conversation. "Hi,

everybody," he would say. "My name's Orville Hardy. Used to be an acrobat. Then a traveling salesman. . . . On every train or plane I ever rode on I used to make friends. Folks gotta find friends on trips. Especially this one. Oh—snooty, huh? See if I care! See you where we're goin'!"

Rube and Joan sort of took to Orville Hardy. And to a burly physician named Warren, whose first words to them were, "Here we go down the old roller-coaster, eh?" And there were others.

THERE was a day of sketchy briefing. They were shown a lightweight vacuum armor, with an oxygen helmet. They were shown how it was put on, how its controls worked. They were shown models of buildings whose interiors could be sealed and pressurized. Some were dwellings, some were glass-roofed hydroponic gardens, some were shops. And there were models of machines.

Once Carl Roland spoke to them—not in person but through a loudspeaker—and just a few words. His tones were clipped and confident—even cocky. "We're going to begin rebuilding a world," he said. "We're going to prove against doubts that a person can live a second useful and happy life on another planet."

He sounded a bit pompous. And the pronoun "we" represented him as one of his audience. But from reports Rube knew him to be only about seventy. Rube shrugged.

A practise sometimes followed by those in charge of a dangerous project is not to tell subordinates exactly what is in store for them or when. It does have several real advantages, one of which is that it prevents useless worry.

Thus, Rube and the others were taken wholly unawares on the morning of the third day. The men were ordered to file from the dormitories through the showers, to assemble in the great white-tiled room beyond. As they stood there, dripping and nude, enameled steel plates slid down in the doorframes, sealing the exits. Before real panic could start there was a hiss from vents low down in the walls. A sweetish, dizzying smell stole through the room.

Rube felt no fear or anger at all—only something like regret. He'd been tricked. This must be *it*. And he hadn't even had a chance for a last word with Joan. Somewhere, in a similar place for women, she'd be undergoing this same thing.

He did not see the dark liquid that now welled through the wall-vents. It gurgled and swirled and rose higher, covering prone bodies and then filling the room to the ceiling. From suspended grids, energy flowed through it.

One thing that happened was that the excess accumulation of mineral, characteristic of aged tissues, was dissolved and carried away. But much more than that happened. The vita process was a sort of halfbreed descendant of the first atomic bomb.

Certain other operations followed. The end product was a long line of capsule-shaped silvery objects, slightly flattened and a little more than two yards long. They moved on a conveyor belt, which loaded them in freight cars. A train carried them to a place in the desert two thousand miles away, where a spaceship waited.

A million things went with them—provisions, machines, prefabricated house parts, tools, books and a trained crew. Real training had not been given to the aged exiles. To do so had been judged useless and time-wasting, away from their destination.

Out there they could be revived from suspended animation in small numbers as things were made as ideally ready for their training under actual conditions as possible. Everything had been minutely planned—like an invasion—maybe too minutely planned.

The ship leaped from the ground and accelerated, with its unknowing passengers. The long months of motion at tremendous speed passed. Then there was a slight slip-up.

One thing that the theorists had perhaps not given enough thought to was the fact that reducing a space ship's velocity of many miles per second grad-

ually and bringing it down lightly on a given landing area on a strange world, is a job of infinitely careful timing and balancing of forces. Only the hard-faced young pilots realized.

Their error was almost trivial. They missed their goal by fifty miles and came down just hard enough to crumple a landing wheel and crush a few of the ship's belly-plates.

CHAPTER III

Crack-Up

RUBE JACKSON became Rube Jackson again in utter darkness, and in pain. His heart hammered as from the effects of a strong stimulant and his hands struggled against curved metal that crowded close to his face and at one point thrust a sharp fold against his chest. With a terrific heave and some outside help, he freed himself.

Above him, in an almost black sky a thousand stars blazed. Meteors traced misty lines of light against them. Rube did not know but here, closer to the asteroid belt, full of the wreckage of a world that had exploded a billion years ago, meteors were very common.

He had no time to consider such things, for the air, a moment ago at normal sea-level pressure, as it is known on Earth, sighed out of his lungs and he was gasping in a thinness equal to that of a fifty-thousand-foot altitude. Someone was trying to get hold of him but panic seized him and he attempted to scramble to his feet.

The gravity, but thirty-eight percent of what he was used to, seemed hardly more suited to human muscles than the air was to human lungs. He floundered in it, as a bird that is meant to fly in air flounders in water. Meanwhile the dry cold of eighty below zero bit into his naked flesh, and congealed some of the moisture on his eyelids. He tripped and fell in the inky darkness that shrouded most of the ground.

All impressions had the vagueness and horror of a nightmare. There was a great weakness in his flesh. Lights flashed around him and shapes moved and his painfully bulging eardrums detected dim sounds. During those moments his mind was never clear and asphyxia in the thinness was pushing it back toward oblivion again.

But even so a glimmer of the truth forced its way to him as by sheer insistent importance. The memory of photographic plates of a distant planet seemed to coalesce with the reality of being there—and the idea seemed to twist his Earthbound intestines.

The result in him was like the panic of a cat whom someone is trying to throw into a fire. He writhed against the inconceivable fact. He got to his feet again and tried to run as if there was some escape. Ordinarily Rube had been a cool, courageous man. Here his very soul seemed to shrivel in a place that was too strange for it to live.

It looked as though death, which a wonderful laboratory process was meant to stave off indefinitely, was going to be his refuge. He had one more terrible realization—that his wife, accustomed to house and garden, visits with neighbors, and other harmless events, must be somewhere here, too. He tried to call her name. It was a tenuous squeak. Then he fell again. Mercifully, his oxygen-starved body cells dimmed his consciousness still more.

But this was not yet the end. He was grabbed, not gently, and pinned down. A hard casing was thrust over his head. Then he was carried. Clothing was pulled over his body. Then flexible armor. There was a hiss and he could breathe again.

He lay panting. He was in a kind of tent, with outward-bulging sides, as if it was inflated. As from far away he heard a voice saying, "Easy, Pop," half gently and half with exasperation. "Think we can trust you outside? Guess so—you're winded."

After that he was under the stars again, but he was warm, and he could breathe. Other armored figures were

hurrying about. Flashlight beams moved this way and that, revealing ground that was scored, like the bed of a dry river. The soil looked like scraps of old paper and rusty dust mixed.

For an instant a knotted dried thing, with great ragged whorls, was revealed. A face flashed momentarily into view, behind the glassite front of an oxygen helmet. Young, hard, masculine—but with strain showing in it. Then, for another instant there was another face—feminine and pretty but also hard and worried.

SOMEONE was rigging a floodlight, and now the flank of the space ship came into view. A great rubber landing wheel was jammed against a stone that might have been carven once, though it was so eroded by dust and wind and eons of time that it was hard to be sure.

The retractable wings, useful for atmospheric flight during takeoff or landing, were extended and undamaged. The hull showed only an ominous crumpling on its downward curve. Since the smash-up a section of the plating had been cut away. Beyond the dark opening tiers of capsules glinted. Some of the lower ones were crushed.

Rube's ears were full of voices—loud now in the radiophone of the helmet over his head. Shouts—orders—curses. "Get them out—fast!" someone was yelling. He thought he knew the tones—those of the leader, Carl Roland. Someone else was hollering for a wrench of a certain size. The prone shapes of others rescued lay near Rube.

A woman was screaming, "John! Where's my John? He's in there! There! What p l a c e is this? Where—" The sounds mingled with disordered patches of intense light and inky shadow as the armored crew milled about, struggling with emergency.

Rube thought again of his Joan being here someplace too—and the protective impulse seemed more like a reflex writhing of his nerves and muscles than a willed action of his muddled and disoriented mind. But he was awfully weak. "Joanie!" he croaked.

A small gloved hand pushed him back to the ground and a girl's voice said, "Cool down, Gramps. Cousin Helen—that's me—will look after you. You're okay now. The space suit keeps you warm, the helmet gives you air and you can say bright things to me by talkie, so why worry? Unlax! There!

"I turn this knob and tune your talkie, so that it doesn't pick up any voices but mine. That's better. Tsk, tsk! What happened was that we missed our landing and cracked up a little. You should be sleeping tight in Suspended, out of the way and no trouble to yourself or anybody maybe for months yet.

"Only your capsule got dented and was leaking, so to save your skin we had to revive you. Same with some other people. Just turn a control on the lid of each capsule with a key and the revivor gas is released. Be good, Gramps? Everything's okay and we don't need your help. *Wups!* Six other people are yelling. Boy, has everybody's p o o r Cousin Helen got troubles!"

As she moved away from him Rube's eyes photographed the ionic pistol that dangled at the belt around her armor. The weapon could be set either to stun or kill. He saw her toothpaste-ad smile, unaware how theatrical it was. Now she was addressing someone as "Milady" and repeating more or less the same indulgent kidding protective spiel that he had just heard.

Rube had to find out who "Milady" was. His numbed fingers in a space glove touched the control on his helmet, spreading the wavelength band of the talkie again. But "Milady's" voice was not his wife's voice.

A couple of other rejuvenates lunged toward where the crew-members were working under the floodlight. The crewmen pushed them back, growling orders. "Out of the way, Pop. Let us do our job."

A shot of some narcotic vapor into the breath-vents of their helmets quieted the two hysterics and they were carried back to where Rube and the others, who had already been rescued from the damaged capsules, were sprawled.

Rube felt helpless and worthless. He

was exhausted. His common sense, which he tried to cling to, pointed only to a dull acceptance of things, and to a vague search for understanding.

As more capsules were brought out of the damaged ship, he watched for one marked with Joan's number—UF 19276. He saw the two airtight tents, their entrances fitted with airlocks, that had been set up. It was in one of these that he had been clothed and fitted with a pressure suit and helmet.

Capsules were still being carried in through the airlocks of the two tents, while squirming figures were carried out. The tents must have genders—masculine, feminine. Rube wondered vaguely why he had awakened in the open, to gasp in the tenuous frigid atmosphere.

The process of reawakening must take at least an hour. So the capsules must be piled high inside the tents. Or else the process was started outside the tents. Had he awakened before he could be taken to shelter?

He didn't really care to know. The babble of voices went on in his talkie. "John, John!" And another voice saying, "Rejuvenation! So this is it. Gawd!" Rube shut the talkie off entirely. Sounds became very dim.

His thinking was like a running comment on a nightmare, but his reason was a little clearer. Almost overhead he noticed a dazzling constellation of stars—the famous Southern Cross. Strange that it must look almost the same here. Some *other* southern hemisphere then.

When a particularly large meteor blazed silently in the sky, he looked back, away from the spaceship. The flat plain was broken by a few, low, eroded hills. And there were clumps of strange sere growths. Beyond was a tremendous expanse of white.

FOR an instant then he cupped the whole truth in his mind with a stark lucidity that seemed to force him to the ragged edge of madness. The colored photograph of a planet in an astronomy book, delicately tinted, fuzzy and pretty, with a little white button covering its south pole and extending far down into its temperate zone, matched in his mind the impossible reality of being here, maybe two hundred yards from the edge of that button!

It was a double image of the same thing, again with the awful difference of distance expressed by the difference of size, and with the dreamlike unreality of so remote a region, contrasted with harsh and present fact.

Words flowed in his head—Mars—the south polar cap—huge in earliest Spring—but tiny in the picture. Just a little white button. How far out of my natural place am I? How far is fifty million miles? Oh, God—there's a difference between knowing and *realizing!*

Only for an instant that sharp-cut clarity lasted. The claustrophobic terror of it might have torn a tendon by the violent muscular reflex it produced. Such things happened in insanity. But he fought the image away from him in time, let the vividness in his mind be masked a little as a scab protects a physical wound. Never again, if he could help it—it wouldn't make sense!

But as he lay there panting he remembered things about Mars. Four-fifths desert—beyond any Earthly conception of deserts. One-fifth dried sea-bottom and gorge-bottom—"canal-bed" if you liked—where vegetation still grew sluggishly. Utterly h a r d y plants—"Lichenlike," someone had suggested, when they were still only a blue-green color, seen through a telescope.

But except for the basic vital process of all green plants—the conversion of water and carbon dioxide into starch and free oxygen under the action of sunlight—how could you compare things Martian with anything so Earthly as a lichen? These Martian growths were dormant during the driest, coldest seasons.

In summer, shortage of even atmospheric moisture, and s h o r t a g e of warmth, kept the chemical changes in them slow, so that they could not maintain much more than a trace of oxygen in the thin air.

Mars—once inhabited, but not by men. How long ago? A million years or

a hundred million? Beings with a larval stage in their development—not insects though. Again the comparison with terrestrial things fell flat.

Leathery creatures with complex breathing organs—they had thought and invented and waged war. And that, it seemed, was how they had died rather than directly by the harshened conditions of their aging planet. The melted-down ruins of the queer structures they had built were still said to show a trace of radioactivity.

The real Mars, not an adventurer's paradise! Too many of the old imaginative stories that he used to read had been too glib. Could cocky young men in vacuum armor flit so blithely from world to world? And Mars was supposed to become a colony—an outlet for overcrowding. A boon to age and youth alike!

Rube waited helplessly, furiously, out of the way, kept warm by the space armor that had been put on him as if he were a baby, by young people who had treated him with compassion. But in their belts were weapons that they did not use. Theirs was the power to compel. They were free to go home when their work was done. They were the haves beside the have-nots.

He did not see Joan's number on any of the capsules and he was glad. She was not one of those who was now aware.

He sat on alien ground, listening or talking to no one. Quite soon it was dawn. The black sky turned deep ultramarine. The hills and scattered rocks and clumps of dormant growths, showed soft grays and rusty reds. A thin wind raised little plumes of dust.

Low in the north, small, and unnoticed by Rube, gleamed Deimos, the outer moon. Phobos, the inner moon, was never seen at this high southern latitude, for it was hidden by the curvature of the planet.

But there was a dawn star, which Rube saw, in fact had looked for. As bright as Venus as he had known it, but attended by a tiny speck that was Luna. Earth. "Damn!" he muttered, cursing himself. He'd just had a warning, hadn't he—about letting his thoughts dig too deeply?

The small sun, half again as far away as at home, rose with a blaze of brilliance, gilding the fine suspended dust that explained the old mystery of why the rarefied air of Mars was so resistent to ultra-violet rays.

A minute later a plane appeared, hurtling nearer, driven by its thin jet of nuclear fire. It flew out those who had been injured in their crumpled capsules, those who had gone really psychotic.

CHAPTER IV

Disillusion

RUBE was pushed aboard the second plane, with some of the others, and took a seat passively. He was being as passive as he could, hoping that that was the way to make a little sense out of a senseless situation. Just ride. Take it easy.

In the pressurized cabin, hands unfastened Rube's helmet, and set it down beside him. "Hi, Gramps!" the girl said. "Cousin Helen—Helen Sands of Tulsa, Oklahoma, if anybody's interested, is along. Nursemaid, tourist-guide, mother confessor, diaper changer, welcoming committee and right at this moment dispenser of coffee—with George's assistance, of course.

"Everybody meet George Jones. . . . Some of you gave George a bad time a little while ago, when you tried to take off for the ice cap. Yeah—you especially, Gramps."

Rube only glared at her dully as the plane took to the air. And he glared at the genial-faced but rather tense young man who tried now to throw a friendly grin at him, pat the girl's shoulder.

Helen's helmet, of course, was off, exposing the bars of authority on the shoulders of her tunic. She had the pride and duty which went with things like that and the front, gaily off-hand now. The latter represented putting her best foot forward, though even that might be

hateful now to some of these rejuvenates for whom she was responsible and she knew it.

The scare in her, behind the tooth-paste-ad smile, was maybe hard to notice, even in broad daylight. That smile was a phony, and in part the reason was anybody's reason—anybody who had spent a lousy few days on Mars months ago with Roland's Survey Group and had just come back. Even the real prep-crew at Port Smitty had had only about six weeks here. And to think she'd wanted adventure.

"Coffee?" she was chanting. "Here—it—is! Who'll have—caw-fee-e-ee. Oh—by the way, don't anybody quote me, but I think that close relatives and friends of all present on this plane are still safely in Suspended. Only some hundred and seventy capsules out of several thousand were damaged, anyway. Of the folks inside there were five dead and nineteen injured and next of kin here were either informed or left to sleep. So who feels better and wants coffee?"

Rube perked up just a little. He saw the faces of his fellow exiles around him, not young but peeling and ugly, as if they were like insects, shedding a chrysalis. His face must be like that too. But it was the expressions that were bad. These were good people, who, for the most part, had lived ordinary lives, and had wanted to believe in the future. But how could they belong here?

They were dazed and bewildered. Some were under drugs. And the eyes of some held fixed in them that scared-cat look. The cat afraid of being burned alive or dropped from a height. A man was sobbing. A little woman was making chirping sounds—it was hard to know that she was praying. Nobody said anything to the girl.

But it came to Rube that she was rather brave—trying to cheer up a bunch like this, trying no doubt to sell their fate to them—himself naturally included. Uhunh—he'd always been pretty good at figuring people. Her brilliant forced smile didn't fade but in her eyes there was worry and something that was like the pity shown a beggar.

Aware of the difference between him and oneself—with the advantage in you by a circumstance that wasn't your fault. Aware too of some flow of animal resentment from him to you—while your own guilty resentment radiated back to him, in spite of yourself. Rube knew how it was from his own past experience.

This girl and this George too were on the opposite side of the fence from his companions and him. Moreover, Rube knew that his old stolid sense of justice was being forced into another shape by circumstance. Yet for one moment he was generous. His stomach didn't want coffee but he signaled with his hand. . .

Cousin Helen filled a glassite cup from the thermos, and her smile of gratitude and success was like a little girl's. "Right here, Mr. Jackson!" she said. So she must have been looking up names. He muttered thanks.

As the pilot up ahead guided the plane above a wide valley or "canal" it lurched slightly and the cup wavered in Rube's shaky hand. So she helped him with it and he let her do it.

She said earnestly in a low tone and in a manner quite different from her previous banter: "Too bad things didn't go as planned for you folks, Mr. Jackson. The people still in Suspended won't be revived till everything is ready for them. And just a few at a time. They're lucky. The shock won't be so great. But you folks'll make out all right."

George grinned. He was a big blond kid. He looked good-natured. His arms, hands, and shoulders were built for handling people who got out of line. "Sure, Pop," he remarked. "My two cents worth says the same as Cousin Helen's. You'll be fine."

Somehow Rube knew that they didn't believe it—that they both lied.

HELEN was across the aisle now, spreading the cheer again—this time to a little man who still looked wizened. "Hello, Beautiful!" she said. It's strange how folks pick a clown to talk to. But there is nothing so unfunny as a clown in real despair.

Rube saw, without normal surprise that it was Orville Hardy, the little ex-salesman and ex-acrobat who had been such a talkative good-mixer at the vita camp. He accepted coffee automatically, seeming not to know what he did, fumbled with the cup, dropped it, mumbled and then tried vaguely to rub the mess off the floor with the heel of his hand. . .

"Nix, B e a u t i f u l—not like that!" Helen chided. But her kidding tone had a crack, right through the center.

She had no more customers for coffee nor did she ask for any.

But undaunted, she attacked her problem of morale-building from another direction. She broadened her smile. "I'm a heck of a hostess," she laughed. "Did I tell you people that this place was Mars? Or did you guess?

"Right now we're taking a slow ten-minute ride in this old tub of a transport to where your space ship was supposed to land—only didn't. Port Smitty, they call the joint, after its founder and oldest resident, Porter Smith. Wait till you see him. Real sourdough of these parts. Famous archeologist. Nuts about Mars. Plays the violin for fun. Eighteen years here. Going home for a vacation, soon.

"About Port Smitty, it's still Mars' only human settlement. Its population was six specialists. It's the survey station, established by the Science Council. Porter's pals have all gone home already but the joint's population has jumped. Wait till you see. Regular boom-town!"

Helen's voice rose hopefully but her audience didn't show any interest. Retreating into themselves from realities that had no kinship with the quiet lives they had known, they remained like zombies—living dead, whose future met no promise of renewed life with fresh opportunity, but hung before them as a grinding sameness of strange confusions, that led, perhaps, to an end more blurry and dismal than the red dust that coated the windows of this old plane.

Did she blame them? She couldn't. For how did she feel herself? Even with advantages over them. For in a few months she'd be home again.

Rube had come up a little out of a reverie of sunshine coming through leaves, of playing with a great-great-grandchild in a park, while Joan looked on, to hear clearly what the girl had said. A faint shame for weakness touched him, a faint questioning about Porter Smith. Eighteen years here? How did the guy do it?

What the drives in Rube were trying to latch onto was some kind of hope or goal to reach for and to believe in. Basically he was a man of action. He'd been big, and strong. But the groping in him remained feeble and finally stopped. He was tired out. He dropped back into reverie.

Helen didn't give up. Maybe she asked herself how big a supply of trying a homesick wench from Tulsa was supposed to have. Well, maybe it just went on forever. Lots of people had probably done a lot more of it. Her smile was getting shopworn and anxious, so she threw it away.

"Ninnies!" she shouted. "All of you—just a lot of big ninnies, feeling sorry for yourselves!" Lord knew it wasn't the truth but maybe it would help. In her head were silent words of apology to these poor things around her.

NO good—it was tough on a girl to be cajoling and grinning and shouting—throwing it all against a bunch of poor doomed critters who sensed their doom and didn't even listen. Especially when you knew that it was all for nothing—that the whole theory behind this particular resettlement project had already proved itself to be stupid beyond words.

The Dr. Carl Roland scheme. Ah—nuts! She'd learned. Old folks—just gentle rocking-chair lizards for years. To Mars! It was a frightening enormity, when you thought of it like that. It was awful. Even the Martians, who had evolved in the place, who were conditioned to its harshness and who had had a considerable science to protect them, just weren't here any more and hadn't been for millions of years.

What could you do with these people? Well, you could put them into a complete stupor with one kind of dope or make them drunk and silly and forgetful with another—for a little while. But using dope on them was restricted both in quantity and type. And what good was it in the long run anyway?

These old duffers probably hated your insides and maybe they had a point there because you were young and were the cause of their being dispossessed of all they had owned—and shipped here! And glory—just how were you supposed to feel about that?

Cousin Helen's next try at the hopeless task of perking her charges up had desperation—in fact almost despair—in it. Roland was still with the damaged space ship and when she'd seen him just a few minutes ago he'd instructed her to keep the radio on the plane open.

"Because I intend to speak to the colonists, Miss Sands," he had intimated. So far she had pointedly neglected to carry out orders. But maybe—just maybe—he had by now learned enough to say something sensible. He was supposed to be smart. He was supposed, even, to be a competent psychologist.

"George," she said wearily. "Let's take an awful chance. Put the Genius on the speaker. But stand by to strangle him." His eyes were anxious.

Carl Roland's voice boomed in clipped tones through the cabin of the transport. His delivery had all the pomp displayed by some after-dinner orators.

"There has been a mishap," he was saying. "Unfortunate—but we must consider it—ah—slight. This is the planet Mars. We are here for several very important reasons. First—to find a real answer to a pressing social problem on Earth—establishing here—a truly effective outlet—for the dangerous burden of overpopulation—which another great triumph of mankind's efforts—perhaps fortunately and not unfortunately—makes certain to be more pressing. That—is the more immediate—practical phase of our purpose. . . ."

Cousin Helen's eyes grew hollow from the failure of a hope against hope. What she had heard so far was just the usual Roland hogwash and pomposity. To these exiles, if they listened at all, it must be the crassest of mockeries, and the most stupid and unknowing of cruelties.

On Earth he might be all right at convincing a bunch of stay-at-home legislators. Here he just didn't have any sense. His hollow bookish theorizing fell flat on its face. And his phoniness was limned against the undercurrent of uncertainty and scare behind his words, making it more hateful and ridiculous. It seemed as if his ego just couldn't come down or adjust.

Helen would have had George cut him off before more harm could be done. Only there was no particular sign that his audience here, h e a r d him. Helen shrugged. Let him go on a little more.

"Second, we have the purpose of fulfilling the possibilities of progress. For instance—Vita is a kind of limited immortality. It must not become—by limitations in other fields—in any phase—a difficulty or burden. Other progress—must be made—to match it—to give it room to fulfill—its fullest success. . . . Mankind's old dream of expansion to the planets—and toward the stars—is the obvious—next step.

"This is Mars. We have landed—near its south polar cap—because there—we are close to—the best supply—of water. Here you will have homes. That is our third purpose. You will build more homes. The principles of—human survival here are well known. Pressurized gardens—under glass—giving food—and oxygen to breathe. Water distilled when necessary from gypsum.

"One settlement—will be built. Then another and another—and more and more. More colonists will come. Technology can answer all problems. Extensive irrigation will be reestablished—after millions of years. Mars is small—but large too. Its surface—all land—equals the land area of Earth.

"The few dozen men who have been here before us could not be expected to have explored in any real detail more than a fraction of so much territory. So

Mars is new—though it is old—and full of geology and history all its own. Picture how it will be a hundred years from now—how you will see it with cities under airdomes of crystal. Populous, rich, lesser earth. Verdant—with people in its parks. Children—"

George cut the speaker-switch at a gesture from Helen and Roland's pretty monologue was broken off. Helen's cheeks seemed to have sagged. Just then she looked almost old.

In a corner seat of the cabin a little woman, who had been staring blankly, burst into wild laughter. Then she buried her face in her hands and began to sob hysterically.

"Rats!" someone growled venomously. It was small wizened Orville Hardy.

Helen went to the woman, thinking bitterly that Carl Roland was the dreamer of melodramatic dreams and that these people were what he had meant to be the doers. What a difference in viewpoint! He'd been out to Mars just once before tonight—on a survey ship that had stayed less than a week. Otherwise he was an enthusiast of Mars via other people's travelogues.

Helen glanced through the grimed window. The plane was starting its glide for a landing now toward a flat-bottomed valley. The hills at its edge looked too desolate even to harbor a mirage. The wind, passing the gliding transport, made a dry sough.

Rube Jackson growled under his breath. Roland's words had got to him to rekindle his fury. Most of it did not last but there was a kind of path leading from it—through knowledge now of how hollow Roland and his scheme were, through release at last from a kind of duty to law simply by having been imposed upon a little too much.

What remained after that was a faint thready glow of rebellious purpose like the dim light at the far end of a long tunnel. He could see no means at all of accomplishing his objective. Perhaps none would ever come. Still he had a purpose, a hope, and though it denounced all that was here it put a small steady spark of life into him.

As the plane descended toward a landing he watched from the window, seeking to learn all he could. In the valley he saw mile on mile of sere ragged plants. Straight ahead, just touched by the brilliant morning sun, was what he took to be—what had the girl called it?—Port Smitty.

CHAPTER V

Homesickness

THERE were a few old structures, hemicylindrical and probably of corrugated iron. They were so dust coated that except for their shape they might have been taken for natural parts of the landscape.

But around them, already bolted together to form the skeletal beginnings of buildings, bright new girders glinted. Several new structures seemed already completed. And there were rows of tents of the kind that he had already seen.

The landing field was wide and it looked freshly rolled. And just beyond this strange settlement, dwarfing it, rose a vast mound. One side of it was broken away to reveal arching rock-strata, an index, no doubt, of scarcely counted ages of Martian natural history. The mound's top was rounded. On it stood ruins—broken down by time and ancient disaster to vague and glassy fragments.

The lower stages of a wall here—a rising monolith, there—strange spiral—a perforated dome. You did not know what they were for but Rube thought of how the buildings of men matched the forms of men—that, for instance, there are stairways because humans have legs of a certain structure—and so it must be here. It had been a city—if you did not want to call it a colony as you would call a community of bees that built, not houses, but combs.

He warned himself to take it easy—to try not to think too deeply—as he had before.

There was already a plane on the field

—the one that had brought in the injured. Glancing back Rube saw that another—a new one—was following. When the wheels beneath him hit the ground he tried clumsily to put on his helmet himself as if some strange spark of power drove him.

"Well, Gramps—Mr. Jackson!" Helen Sands exclaimed, sounding surprised and pleased—in a ragged sort of way, for it still seemed to her that something in her nerves was about to snap. "What wonder is this?"

He grunted uncivilly, then thought better of it. This girl had been kind. He remembered his manners from—how long ago was it and how far away? "Thanks for trying, Miss," he said. He didn't tell her that the wonder in him, that made him different, was the simple hope of walking on the green grass of Earth again or on a pavement there or even in—say—in a tunnel of its deepest darkest mine.

The transport taxied to the end of the field where the buildings sprawled. Young men in space suits ran toward it. Its passengers, once again wearing their oxygen helmets, filed forth, stepping with dull caution because of the treacherously feeble gravity. Of them only Rube had recaptured some inner gleam to live for here in this dust-choked graveyard world. No—maybe there was another too—Orville Hardy.

Standing quietly for a moment in the boot-printed dust Rube looked around him—almost searching for someone. Not Hardy but a legend. And then he saw the man standing by, smirking with a cynical kind of gentleness. An introduction wasn't needed.

In the first place he wore no space suit. Just a heavy jacket and sweater, much mended, old boots and, it seemed, several pairs of trousers. Of course the sun was warming up the ground and thin air fast now. But an oxygen helmet remained indispensable and this man's was old and dented.

The face behind the scratched window was so browned and gnarled that it seemed as if the substance of Mars had been engrained into it. The narrow brow, under the scraggles of white hair, seemed like an echo of a cloistered life on some quiet campus long ago. Bookish and undoubtedly with some poetic reaching toward the stars, carried in his case to the point of fanaticism.

But in the face there were signs of old pain and punishment for this too. Little glints crawled like bugs in the faded blue eyes. The humor of those glints was dry and kindly. But they also showed what seemed an eternal puzzled questioning—a groping to clutch an elusive truth that was forever not quite tangible.

It suggested deeper understandings of certain things than is ever possessed by the average person. But it proved, too, that the punishment-scars extended, deep and blurring, into the cortex of the man's brain.

Rube studied him keenly for a moment, possessed of a curiosity and a wonder as to why and more especially how this guy had managed to live on Mars for eighteen years. Rube opened the switch of the talkie in his helmet, wide, letting in a roar of many voices. He was about to speak—when instead he was spoken to in thin precise tones.

"Yes, Mister, I am Porter Smith. Welcome and good luck. Come and see me in my workshop before I go. I won't be here too long any more. No doubt you've already heard. I am returning to Earth. I have grown very tired of the Red Planet. I believe that I have earned some time to be spent on Earth after I have been vitaed.

"I miss my native Colorado—I miss Los Angeles—the people, the noise, the trees. And most of all I miss the ocean. I will listen to other musicians' music. I am sorry that I can suggest nothing that might help you vitaed colonists in the great trouble you now feel. Though there may be some good in the rebellious idea that I think must have occurred to you, personally. Good luck again! . . ."

The speech ended with a dry and gentle titter.

HELEN SANDS, whose nerves had been tautened to the cracking

point by her struggle with events during the last few hours, made a sound a little like the protest of a wounded bird. "Smitty—you too!" she complained tiredly. "Why can't somebody build these people up and sell them Mars instead of saying everything to break them completely!"

Just then a tall man from among the rejuvenates tore off his helmet and began to run, the breath rushing out of his lungs in a thin scream. George and some other young guards dived and he went down, hard-hit. Their purpose was rescue. But their pity was tinged with exasperation—almost anger.

Physical action gave it a kind of restrained savagery. He was very fuddled. They were much more sure. Both sides could deny any blame for the have-versus-have-not conflict that was here. Rube knew that in this case at least it was just life. Still there was passive anger in him that stood at a fellow being's shoulder.

Smitty's talk about going back to Earth might have shattered him just as it had seemed to shatter this poor wretch. But now it did not. Instead it seemed to brace him. "Rebellious idea," Smitty had said. Keen old guy! His knowledge of how people reacted to Mars was so sharp that it made him appear almost telepathic. As Rube moved along with the column of exiles he wore a faint grim smile.

He was thinking of return to Earth—for Joan, who mercifully was still in Suspended, for himself, perhaps even for all of his companions. That the obstacles seemed insurmountable—that it was against the law for them—that it was against his former ideas of justice—that as yet he had not the faintest idea of how to begin accomplishing his objective—that, trying, he might be killed in some weird way—that even if, by great good-fortune, they somehow reached Earth they would undoubtedly be arrested—all this was unimportant.

The key point was that the goal was something to live for and fight for. It was not a promise of immortality, turned into a living death, that must become real death soon under dust.

With the others, Rube passed through an airlock and into a large room that was sealed and pressurized. The sexes were separated, and all submitted to brief examinations by an impersonal young doctor. Hot soup was passed out, which some seemed hardly to notice but which Rube ate grimly because he knew he needed strength. He was not one of those who was fed intravenously.

Roll-call was responded to haltingly. Blankets were issued and with the other men Rube was guided through a passage to the interior of a large inflated tent, beyond whose sides wind-blown dust seethed faintly. The soup might have been drugged, for now Rube felt a bit drowsy. Several men, doubtless the slightly injured from the first rescue plane, were already asleep on the floor.

The newcomers had already been relieved of their space armor and oxygen helmets but now a guard patted them under the arms, exploratively. "Just to be sure you haven't found anything to hurt yourselves with, or to use to rip holes in the tent wall, and let the pressure out," he explained with a grin.

As Rube was selecting a place to lie down, someone spoke from behind him in the semi-darkness: "Looks as though the men from our old bunch at the vita camp were all stowed in the same part of the ship, where the cans they were in could get smashed together. Logical, though—since we were cooked in the same kettle.

"I just spotted Doc Warren—remember him? Over there. Got his arm hurt, so they brought him in with the first. Now you, Jackson. Nobody else we know especially—but it's best to keep the club small at first, eh? You look brighter than you did—also brighter than most. These facts interest me strangely—as to cause, Jackson."

These words were given in the very low even tone that still sounds hard and suggests secrets. So Rube turned around very casually. "Hello, Hardy," he said in a similar tone. "You sound lots brighter too. Maybe, like me, you had some pleasant thoughts."

"Umhm-m," Hardy grunted. "To cut Roland's throat is a pleasant thought. To have been a sucker—past tense—ain't. Maybe I could have been vitaed and stayed on Earth too. I wasn't born in a tough neighborhood for nothing. There have always been fixers whenever enough people wanted something that is supposed to be illegal. Fake papers and stuff. The pleasant part is that, if I ever got back— Do I bore you, Jackson?"

RUBE shook his head. "No but you are daydreaming, Hardy. You are far too fast—and too slow. Shall we talk to Dr. Warren?"

They went quietly to where the burly physician lay in a blanket and sprawled inconspicuously beside him.

"The last few hours were very rough on us, Doc," Rube whispered. "How were they for you?"

Warren still seemed very shaken. "Don't ask for details, fellas," he pleaded. "Just remember your suffering at its worst, and accept the fact that it couldn't have been any easier for me. It's still pretty terrible. I should have realized."

"How do you explain it, Doc?" Rube asked.

"Space nostalgia—just a particularly terrible variety of homesickness," Warren answered, whispering now with a clinical sort of calm. "I treated some cases of it twenty years ago just before I quit my practise. Young men who had dreamed about going to the moon almost since they were tots in most instances. But they couldn't face the reality of what they wanted. One was there only two hours before he was loaded on another Earthbound rocket. Raving crazy.

"Before he landed on Earth, he had gone into the passive secondary stage of the trouble—staring vacantly at nothing, refusal of food and water. He responded to treatment but not permanently—he could not be permanently convinced that he was home. Unguarded for a moment during a recurrent delusion he committed suicide.

"There was even one case wherein a rocket pilot in training had a seizure of the nostalgia only a thousand miles above the Earth's atmosphere.

"Homesickness, the common, old-fashioned variety, has existed longer than mankind. Most of the higher animals are susceptible to it. Many have pined away and died when removed from their native haunts. I do not believe that any man is entirely immune to it—even when only terrestrial distances are considered. A human being is very apt to be most at ease in surroundings to which he has become accustomed. Man is on a shorter tether than he thinks.

"Projected to an interworld scale of distance and difference homesickness becomes infinitely worse. To the average person the idea of being on another planet is too strange for his emotions to accept even though his intellect does so.

"He has his narrow segment of natural reality, not only established by personal contacts but inherited from his ancestry, all of it terrestrial, back to the start of evolution. Thus Earth enslaves its own.

"Somebody once said that to look on the face of God is a terrible thing to mortal man. That about describes a personal venture beyond our narrow reality. The awful newness, the loss of the values of habit and instinct, even to that of breathing, the sense of complete insecurity, and of being trapped become just too much.

"The moon is bad—jagged mountains, no air at all, black spatial sky from which the cosmic rays beat down unchecked and the meteors fall without flaming. But compared to Mars it is just a place with a simple volcanic history and no deep enigmas and there is always that wonderfully important thought that you can rocket home from it in just a few hours' time.

"On Mars, aside from local messages, a radio can pick up only a sleepy rustle of static. For no Earthly station has yet been built that can beam its waves this far. Out here, if you think too much you begin to be terribly grateful that—that the magnesium of your space suit is—part of Earth."

"Steady, Doc!" Rube hissed, as Warren's whisper began to waver and crack. "Forget it! Tell us some more!"

The physician sighed heavily. "Thanks, Rube," he said. "To continue—you can see strain in every one of the young personnel. And remember that everyone of them is a comparative rarity—a real adventurer, psyched and screened and selected from the cream of the crop of young space enthusiasts. Also, remember that they're well paid and that their families are waiting for them back home.

"Do you know it's strange—the ultimate obstacle to really extensive space travel and colonization does not seem to be in the fields of effective propulsion, danger of crashing into meteors, the effect of weightlessness on the human body or even in the technology of living comfortably on strange planets? All those things are solved. The real obstacle is in man's mind with its intricate psychology, where apparent trifles are so important to his well-being.

"I, of all people, should have realized. The best real cure of even simple homesickness, begins with return of a victim to his home. Drugs and mental suggestion help. And you can burn space nostalgia out of a person, by dulling permanently certain brain-areas with radiation. Hmm-m!

"Maybe you don't like the idea. I don't. Here I think it must be under severe legal restriction though you can't be sure of what won't be ordered as an emergency measure. And maybe it would even be best—with all its faults."

"What do you think about our Doctor Carl Roland?" Rube asked.

"I was coming to him," Warren replied, his lisping voice—he was toothless as Rube and all of the others were—slowing down. "I said that I, with the experience I have had, should have realized how it would be when a bunch of us revitalized oldsters were shipped out here.

"But I knew how desperate it was that new room be found for people to live in. Besides I believed in Roland—looked up to him. A brilliant theorist, I'd heard. Maybe he is that. Far as I can see now though he falls down terribly in practise.

"Even under perfect conditions his plan is no good. People aren't made for it. All that gives me strength is the thought of going home—somehow. It's got to be. I'm—so—damned—glad—to—be—sleepy. I thank them for the soporific."

Warren began to snore.

"Nice soup, that was," Hardy remarked. "It'll put us under pretty soon now too. I haven't been wasting time though, Jackson." The little ex-salesman lowered his voice still further. "Been thinkin'," he went on. "They'll repair the ship. We'll watch our chance, knock somebody over, grab a weapon or two . . ."

"Hold on," Rube cut in. "Let's go slow on the melodrama. And keep it simple. Less chance for error that way. Anyway we've got to know our ground first. Better forget the melodrama altogether—for now. There might be a better means. A little of the old Fabian policy, maybe—delay. Besides we've got more immediately important things to do."

CHAPTER VI

Stymied Promise

AS if to explain Rube's last remark there was a low, anguished moan from one of the nearby sleepers. From farther off, either in the woman's quarters or wherever the seriously injured and the violent were, there was a thin shriek.

"Even dope doesn't hold some of them down," Rube went on. "But you and Doc and I all found us a medicine that works—a little. So what do we do? We pass it around, before everybody goes blooey."

There in the semi-darkness Hardy's wizened peeling face, which showed small patches of new skin, almost smiled. "Hmm-m, I catch," he grunted. "May I

doctor the first patient?"

Hardy glanced first across the tent, toward where the guard stood to be sure that he was not paying them too much attention. Then he crept several yards to the nearest of the other prone men. The fellow was not asleep. He only stared fixedly at the fabric roof.

"Why so glum, friend?" Hardy whispered. "Want to bet that Roland won't have to take us back to Earth in a few days? Use your head, pal. By now he knows his scheme's a flop. He can't let us just die out here. The government won't let him."

Hardy wished that he wasn't afraid that he was an awful liar.

His subject's eyes never changed. For ten seconds it didn't seem that he had heard. Then he said slowly. "This is like war. We were all of draft age."

"Suit yourself, sucker!" Hardy retorted angrily. He picked another subject. This one would not respond at all.

Meanwhile Rube had worked a couple of customers. The second gave him an answer that made butterflies of his own recent terror flutter furiously in his stomach. "My name is Bob Walsh," the man whispered, without being asked. "If I were dead I couldn't be as far from my granddaughter as I am now. Hell and heaven can't be as far from Earth as this. Home is just a star."

Both Rube and Hardy, somewhat shaken, gave up for the time being. When they had returned to their blankets Rube said, "We can hope, can't we? 'Nother thing's important. Control your mind—don't think, pal. But observe—watch for chances . . ."

"Gn-n-n-aa-ah-h!" Orville Hardy snored.

While they slept seven dead were buried in the history-ridden dust of Mars. Five had been crushed in their capsules. Two had died of injuries and madness.

Rube awoke at last, hearing clipped tones from an amplifier system dinning in his ears. Carl Roland surely had a penchant for addressing audiences in that manner. Rube felt cold, even though heat radiated from an electric grid. The corners of the great tent were webbed with frost. The sunshine coming through the fabric was brilliant. He'd slept the clock around, through a day twenty-four hours and thirty-seven-plus minutes long.

Men lay passively around him—Hardy and Doc Warren included. Whether they listened to Roland or not was hard to say. Rube let most of the words flow past him. More infuriating hogwash, the tones in which it was given were tinged now with definite evidence of scare and wildness.

"We must all work as soon as possible. Work is excellent therapy. You will love your new homes. We must not lose heart. We shall be very happy. Do you know that there is a Martian plant which stores an edible starch under its hard shell? We shall cultivate it on a vast scale. Earth plants too. You shall become as native Martians."

Rube might even have tried very hard to believe all this—but in Roland's tone was the frightened wonder of a fool, confronted at last by the fact of his foolishness. He did not believe himself. But admission of this was not in him—not yet, anyway. Well—maybe one hope lay in that direction. Rube was heartened a little.

Feeling that it was best that his friendship with Hardy and Doc Warren should not be too often evident to observers, Rube moved toward the tent exit alone. And his immediate wish was realized more easily than he had expected.

"Suit and helmet, sir?" said the young guard with a politeness that thinly veiled a certain cynical mockery. But Rube got the equipment. "Chow-hall—Main Street," the youth added.

Rube found his way out into brilliant sunshine and thence to the mess-hall airlock. With his helmet beside him on a bench at a long table in the almost deserted place. The buxom young Amazon in uniform who ruled here looked at him sadly. He judged her to be a talkative type. But now she seemed as disinclined toward conversation as he was.

But to promote his rumor—his medi-

cine for sick emotions—he took a parting shot at her as he left: "I hear that we'll all be back on Earth soon," he said. "That the Roland scheme is turning out to be a flop and is about to be abandoned. . . ." It was a saving kind of sabotage.

Out in the dazzling sunshine again he followed his plan to observe and learn so that if and when the moment for action came, he would know his ground. Port Smitty's aspect was changing under a forced drive that was like that of a military operation, the technical aspects of which have been calculated mathematically and plotted on paper, down to the last screw and button.

That the space ship had been disabled many miles from camp scarcely seemed to matter. Prefabricated parts, made to fit each other perfectly, were flown in by plane and assembled swiftly by young men in armor who know their jobs.

THE first great greenhouses, vanguard of the vast hydroponic gardens which were supposed to follow, were going up, it seemed, almost by magic. Dormitories and other buildings, begun with the sketchy materials brought in by Roland's survey ship months ago, were already finished.

An atomic generator of electricity, compact and massive, was flown in. Its sealed, cubical case, which concealed and protected its self-sufficient mechanism, measured less than a yard on either side, yet it could have lighted and heated a small city.

Air-purifiers came, bulkier things whose working principle was centered in a complex molecule resembling that of plant-chlorophyll, and were set up, along with air-conditioning pumps, in a special shed.

And there was a furnace and a still for roasting water out of gypsum rock —though water could be flown in from the polar cap and though a small underground aqueduct, built by the ancients and leading from the same source, was already under exploration, preparatory to its being unclogged of sediment and repaired for service.

There were electric forges and equipment for machine shops. The list of things was endless. But the benignance of a society toward the outcasts which it had felt guiltily forced to expel was best expressed by the growing heap of more intimate paraphernalia in the growing supply dump in Port Smitty's chief thoroughfare.

Crated stoves, boxes of pots and pans and dishes, furniture, bales of clothing, books, whatnot—stuff for the sealed cold-proofed apartment houses already under construction, where the exiles were eventually supposed to live.

It was all like a great and sentimental peace-offering, grotesquely out of place. For the red dust of Mars already coated it and little murky whirlwinds in the thin air gave promise of the time when most of it would be abandoned and buried. That thought, again, had shreds of panic in it, so Rube pushed it away.

His talkie with its variable tuning gave him access to all conversations carried on by that instrument in camp. Thus he contacted the forces of disintegration already hard at work in the human factor. Scraps of talk which he overheard revealed those forces plainly.

"Poor old rejuvenates. We gotta do what we can for 'em. It's tough on us—but worse for them, Jim."

Pity, that one was. And who wants pity? But the answer was worse.

"Like fun, Dave! We wouldn't be in this hole if it wasn't for them. Why should those old coots be living anyway? They've had their time. Put 'em out of their misery, I say. . . ."

That was hate and prejudice, which is often brought out in individuals, under strain. Rube responded to it with a cold fury. And would other exiles who heard, like it any better than he?

Such was part of the disunity smoldering under the bustling exterior of Port Smitty, wrecking morale—or was it Mars that did the wrecking?

There was still more— "Take Roland, Dave. Yeah—the boss. What does he do but sit in that bullet-proof office of his and talk? And he'll probably be back home sooner than any of us to make

some kind of phony report. Hmm!—wonder how a certain rumor got started, Dave? Funny how people hang onto life."

The guy, Jim, was shameless—he didn't seem to care who overheard what he said. He was unwary and openly insolent. Rube recognized this with a certain satisfaction. From the exiles themselves he heard a few things too. A few hardy souls had regained the power of speech. . . .

"Yes, Mary Madigan—sure as my name's Annie Riley—I'll see the Big Shot myself. The Government can't leave us here."

Rube didn't smile. He was glad that someone else would make the petition—would and could. And yet he saw how small the hopeful signs were and with time his mind medicine seemed to lose some of its power.

Depression came over him and in the early afternoon some vain impulse to escape urged him out into the mile-on-mile flats of the valley around Port Smitty.

A guard tried genially to wave him back but he ignored the gesture and the guard let him go.

He could not go far for he was tethered by a claustrophobic fact—the limited hours of usefulness of his oxygen helmet's air-purifiers. For a while he pushed through the endless clumps of sere Martian growths. Then, on the strength of youthened muscles, he mounted the rise to the rather unrewarding expanse of a city so long dead that its surface ruins—it must have been mainly underground anyway in such a severe climate that had even then prevailed—told really little of what it had been like.

Rube's jaws felt sore and what did it matter that this was because the embryos of teeth had been planted in his withered gums and were sprouting—recalling to him some painful childhood memory? What did it matter that on bald pates—his own was probably the same—he had seen fuzz or that hoary white hair was beginning to darken at the roots?

IT was all a stymied promise that made no more difference in ultimate mortality than the difference between peace under cool green grass and the same peace beneath drifting red dust—though, being still alive, he knew desperately which end he preferred. There was gut-twisting panic in that, once more.

So, being warned, he retreated into the mind-saving refuge of reverie. About his own street and about the Virginia creeper vines on the porch from which he had been dispossessed.

Yet what was that reverie itself but another symptom of the nostalgia that could kill? And yet, what was that strange guilt in him? About the gift of vita, which no previous generations had known? If the Martians had had the equivalent of vita, still they had mismanaged it for they were gone.

In the late afternoon, Rube Jackson wound up back in Port Smitty and at the airlock of Porter Smith's habitation. But if he sought guidance there Smitty's cynically gentle eyes denied it to him though they made him welcome.

The hut's interior was utterly cluttered. The sealed-up air reeked of stale tobacco smoke and cooking odors. Canned goods were stacked high on shelves. The rest of the place showed a curious combination of traits in its master—the slovenliness of the lout in personal matters and the precise reconstructive skills of the scientist.

"You need not tell me your name for I will not remember," said Smitty. "But does it make any difference? When I return to Earth I shall have much to write about. Did you know, for instance, that the skeletons of the dominant Martians were very simple—having the form of a spiral and being a kind of continuous rib?" Smitty pointed to a white fossil, carefully mounted. Its helical structure bellied like a jug.

"It is like the rib-cage in man," Smitty went on. "To protect the vitals. But against the weak gravity the limbs did not need bones. Did you know that on Mars, in its remotest past, no true coal was formed—only lignite? Again it was

the weak gravity—not providing enough pressure under ground to produce coal of high density as on Earth.

"But one wonders more about the thought of the beings of Mars, shown for example by their inventions. Principles are forced to be the same by Nature with its universal physical laws. A simple Martian lens for a camera or a telescope of glass, of quartz, or of synthetically produced diamond, can scarcely be distinguished from earthly counterparts.

"But in more complex devices, the variations of detail are odd. In the reciprocating steam-engine, the electric generator, the wireless, the electric battery, there are some strange differences. It is like what I notice of the oldest Martian pottery—it bears the marks of the digits that molded it. They are not whorls, as in human fingerprints. They are something similar, that is cross-hatch. Look around if you like."

Rube obeyed. Metal had been cleared of rust and oiled, even put into working order. From the brooding, lumpy masses of machines, some as old as the dinosaurs on Earth, he caught echoes of other minds thinking.

There were heavy disc wheels without spokes.

There were odd copper arms, ornately tooled. There were enamel-lined vats, which must have been for acid or caustic substances. There were thin rods, which clearly had the function of electric wires. Just to look was a strange, abhorrently fascinating experience.

"One thing I never found," Smitty said, "though I always hoped, was a photograph or picture of the ancient Earth, seen through a telescope from this distance."

This s i m p l e statement whitened Rube's cheeks and he felt as if he had suddenly found himself poised at the brink of some impossible abyss. Mentally he lunged back and recovered.

"I am sorry," Smitty chuckled. His faded eyes were gentle and amused and understanding, so that no one could take offense.

Then, with hands that matched the battered wood, he took up his violin. He played fragments from Beethoven, then skipped to another mood in Foster's *I Dream of Jeannie*. With the music, strange smokes coiled in Rube's mind. He felt shaken and yet, at the same time, some part of him felt at peace, able to accept the inevitable without flinching.

"Thanks, Smitty," he said when the music was finished. "I guess I'd better go now. Thanks again."

Smitty didn't protest that he should stay. He only made what might seem an irrelevant remark, with a sympathetic gentleness, "Umm-m—yes! The equinoctial storms will come any day now. They are worse here in the Southern Hemisphere.

"Did you know that the climate of the Southern Hemisphere of Mars is different from that of the Northern? That the winters are colder, and the summers milder? It is that Mars' orbit is so eccentric—when it is summer here we are nearest to the sun. In winter we are farthest away. The Southern Polar Cap grows much bigger than the Northern."

RUBE ate his supper in the mess-hall with Hardy, Doc Warren and a few of the other colonists who had proven to be most rugged. Helen Sands was present, her toothpaste-ad smile borne like a brave and tattered banner. George was there, offering that the spaceship was being repaired.

What other conversation there was, descended mostly to platitudes. The company ate listlessly but at least they ate. On a comparative basis perhaps that was a good sign. No one mentioned that there were five more dead. The cause—space nostalgia.

Hardy and Doc and Rube had a talk again that night in the dormitory tent. "The-return-to-earth rumor medicine is working some, Rube," Hardy offered. "Bob Walsh was one of the stiffs you talked to last night. Well—he's improved. Maybe you didn't notice but he was with us at supper. As for Roland—I think he'll crack and give in."

"You're an optimist," Rube commented dryly. "Wait and see."

CHAPTER VII

First Blow

IN the morning Carl Roland gave a loud and violent harangue over the sound system. "The tales one hears are foolish!" he yelled unsteadily. "Did we journey millions of miles on a picnic trip that is to end at sundown?

"Our craft is being reconditioned for the reason that spaceships represent an enormous investment which must be saved. Also its remaining freight can then be flown here without unloading. And it is best that the craft be docked here in camp!"

Hardy's eyes took on the gleam of murder. "Heh-heh," he chuckled sardonically, from his blankets. "Roland wants the ship here so that it'll be handy for him and a few of his friends to skip out with if the going gets too rough!"

Rube shrugged wearily. But in his taut nerves he felt an overpowering need to be doing something to occupy his energies.

After breakfast he wandered for a minute along the main street of Port Smitty, looking at a weirdly different Martian morning. The usually dehydrated air had acquired some humidity during the last few days. According to reports the Polar Cap had been melting.

So now the dry ground was rimed with frost. The ultramarine sky wore a thin cold-looking veil of pearl—it was the polar murk of springtime. At the horizon it was mixed with suspended dust. In the east the rising sun changed its streamers to trains of fire. But as yet the thin air was still.

Rube went to the administration office and asked to be put to work. Very promptly he was laboring over hot metal in the just-completed forge-shop. Old skills flowed back into his big hands. His task helped him to control muddled thinking, even gave him a certain pride. He was making parts to repair the damage done the spaceship. *Hmm!*

Was it that quick efficient youth, used to the swift a s s e m b l y of perfectly matched parts, still was prompted to appeal to the talents of older generations when it came to the more flexible business of improvisation? He found a savage satisfaction in the thought.

At noon he found out that both Hardy and Doc had followed his example. Hardy, lacking special manual skills, was, at the moment, helping cynically to outfit apartments. Doc was with chemical supply. "Good spots in which to wait and watch," was Hardy's comment.

The wind had begun to keen. Only one-ninth as dense as Earth-wind at the surface it could still lift columns of powder-fine dust against the weak Martian gravity. Daylight grew rusty and dim. When night settled the whine of the storm was a tenuous tortured whistle, as steady as the hum of a generator. It plucked stridently at nerves that had never before known what it was like.

The solid matter in it blotted out the stars, till the darkness was absolute. Drifts of dust piled up unseen. Mars seemed to become some Stygian netherworld trap a hundred million miles beyond hell. The stout tent, where Rube and his companions lay, stood against it but the mind-effect needed no help of physical harm to make it deadly.

Rube, for his part, struggled to keep a strange double-vision from his thoughts—of a fuzzy opalescent globe with a tiny blob of ochre creeping near its pole—Mars, that was, seen through a telescope from Earth, showing one of its famous dust storms—and of this reality.

For the contrast of the pretty bubble with its minute, dusty smear, hinting at a remote ungraspable region, and the gigantic fact of the storm itself at close quarters held in it the seeds of grasping an understanding of distance from all old familiar things.

It was a grasping of the impossible—of a strangeness which still-primitive human nerves could not accept. Until he controlled it it brought to Rube that scared-cat panic. And even then cold

sweat beaded his forehead.

Little Hardy, speaking at his shoulder, said: "He'll crack, Rube. Roland'll crack like a piece of glass. He's not as tough as we are. Then when the ship's repaired we'll all leave."

"We hope," Doc whispered unsteadily. And that in fact was what kept them going—the hope of seeing Earth again, whatever the price of return might be.

But during that weird night the sustaining hope that had been kindled by only a rumor died out in many hearts. When dawn brought s m o k y light through the undiminished holocaust the new hospital was already full of cases whose raving hysteria had to be subdued by drugs.

Nor were all of these patients rejuvenates—simpler folk who for the most part had lived their long lives far from the dream of human cities across space. Some who were brave and who had cherished that mighty romance were among its victims too.

Three bodies were found that wild morning out in the open, scattered along the central thoroughfare of Port Smitty. All were clad in space-suits—minus oxygen helmets, which had been discarded in hysteria.

Two were rejuvenates, a bulky man, and a little woman whose peeling cheeks showed signs of returning prettiness. And a young man—a real youth. Nineteen, maybe. Blond. A guard. One whose purpose was to help take care of the aged exiles—get them acclimated to Mars.

ALL of these bodies were frozen stiff as wood in the awful cold. The faces were now rigid masks that showed terror and the anguish of asphyxia. But the faces were no longer just frozen. The wind, utterly moistureless now, had sublimated the ice-crystals out of the flesh till they were partly mummified. That was Mars.

Rube, Doc and Hardy saw the bodies being picked up. They turned away. Rube spoke softly into the talkie in his helmet, the plastic window of which was already blurred with clinging dust.

"Some work still goes on, I see. So we'll work too—keep ourselves busy. That Roland didn't spiel on the sound-system this morning is a healthy sign. . . . If nothing happens by noon I'll do something."

What Rube meant did not happen. So at noon he fought his way through the storm to the administration building air-lock. Controlled fury gained him entrance. "I want to talk to Carl Roland, that is all," he growled at the two young guards. "I mean him no harm—yet. To make sure hold onto my arms while I am with him!"

Rube was a big man who spoke with complete lucidity. The guards were awed. They had troubles of their own and they did not love their boss, Carl Roland. Maybe in some way they even liked Rube. So, in a moment, he stood before Roland as he had wished.

"You know why I am here," he snapped levelly. "Why anyone would be here. It is too bad that a plan failed. There may be some other way to make it work—even though the evidence of medical statistics is against it. But that is not the point, now.

"It is that lives are being lost and that every extra day will mean more, leading to catastrophe so complete that plans similar to yours will be discredited forever. I add my voice to the voices of others, demanding the withdrawal of all persons on Mars that wish it."

Rube was looking at the thin pallid face that few here had ever seen. The truth was that he'd come here to look and to find out what sort of person he had to deal with, more than he had come to talk.

Rube supposed that, by properly directed self-publicity, a man could build himself a reputation as a brilliant theorist that was not quite valid. But now he was not sure how much this applied to Carl Roland. How much of prissy pride in his own ideas went into Roland's rigid and stupid stand?

How much of cowardice and vanity made him hide behind armor plate and guards, while he t a l k e d to people through a microphone? How much had he been brilliant and how much had

Mars damaged him, as it damaged any other man? Rube was not sure that he could guess.

But Rube saw the sweat on Roland's lips and the vagueness in his eyes, which hinted that he no longer understood reality. It was not an obvious madness for which he could be deposed from control —it was worse. Rube sensed, even before the man spoke, that Roland *had* cracked—but in the wrong form. Monomania!

"I don't know you or why you've burst into my private sanctum," Roland clipped out prissily. "All I know is that things will go on just as planned. In fact I've ordered more subjects in suspended animation to be revived. Apply by number in the vita office if you have a wife whom you wish to see. That is all! Now I'll squelch that silly rumor of return to Earth, once and for all!"

Rube didn't answer. But as he put on his helmet and left he was not depressed. Instead he was almost elated, for what had to be done was clear. Roland would be blabbing again now on the sound system, trying to cut the last threads of hope that was all that maintained the rejuvenates and doubtless many of his young henchmen too in a semblance of sanity. So hope had to be maintained at all costs.

Back in the forge shop Rube proceeded to pick his plan from those he had held in reserve at the back of his brain. Something simple it had to be, something with the least chance of miscarriage. Something that perhaps made use of disintegrating morale among the guards, due to Mars and to Roland's mismanagement.

To check up he listened with his talkie, wavelength band opened wide, to the babble of shouts, cries and scraps of conversation that came to him from all over the camp.

INEVITABLY under strain and with difference of privilege so clear inter-age-group blows had already been struck sporadically. Curses of Roland were common among the guards. Still there was a harder core that would hold to discipline and could only be mastered by force. Good fellas.

Rube saw some of them from the forge shop windows, their armor grimed with dust, their ionic pistols readied in their holsters. They wouldn't want to kill any more than he. They were supposed to be the agents of a benign society —but they would uphold Roland as they had sworn to.

Rube chose a plan that looked best for the circumstances and showed the least likelihood of producing mass death —though nothing, he felt, must stop him.

While he hammered a small but significant piece of copper down to a thin plate there in the forge shop he saw the spaceship groping through the storm by instrument like a vast airplane. Bulking and vague it came down on the landing field. It had been repaired enough to fly as an aircraft already.

"Good that it's here," he muttered. "Joanie's on board."

Before supper he went to the vita office. He did not know that he was wise to ask for Joan's revival. He only knew that, in view of what lay ahead, he wanted her with him, tangible and alive, not lost and inert among the stacks of capsules aboard the spaceship.

At the messhall he studied the airlock mechanism again just to make sure. But he knew his gadgets pretty well.

That night he outlined his scheme to his three best friends there in the sleeping tent. "If you know a better way, we'll use that instead," he ended.

"I could get some guards themselves in on it, Rube," Hardy offered. "Good guys."

Rube shook his head. "Most of them are good guys," he whispered. "No use trusting any of them too much though—beyond hoping for their passive support. And it would be no favor to them to ask them to incriminate themselves in our revolt.

"If we wind up in prison back home—well, life is supposed to be longer now. All we need for our job tomorrow is about twenty men. I think you can pick 'em from the rejuvenates, Hardy."

"Sure—but how about the really good folks from among the keeper-class, Rube? George and some others, especially Cousin Helen Sands?" Little Hardy looked anxious. "Helen's a swell kid," he added. "We wouldn't want her hurt."

"No," Rube answered. "And none of the others if we can help it. They'll be somewhat uncomfortable. But what can we do? Keep the rumor going, Hardy—it's like the smell of Earth-clover around here—no, it's the breath of life. But don't give details away to anyone you dan't have to."

"I'll be waiting tomorrow then at about one o'clock—you know where," Doc Warren said, checking up.

"I'll see you a lot sooner than that, tomorrow morning," Rube told him. "Special personal job I've got for you—at the apartment they gave me—one hundred and seventeen. What would you call it—rebirth on the march?" He chuckled. "I'm sleeping there tonight."

Through the seething storm he carried a capsule marked UF19276. It weighed hardly more than a third of what it would have on Earth. He made another trip from Supply, bringing canned goods and utensils. He turned on the electric heaters.

Then, by the glow of the lights, he wrote his wife's name in the Martian dust that had settled on the white enamel of the stove before the windows had been put in place and sealed. Just then, for all the homelike qualities it had, that stove might as well have been a piece of flotsam, whirling in the spatial cold of Saturn's rings. Rube was tense about Joan.

He cleaned the apartment up, set it in order, then tried to sleep. He tried to think optimistic things—that the Earth government was benign, that Roland's scheme was just an experiment, that laws could be changed.

He remembered too that a spaceship's shell, perhaps not minutely streamlined and smooth after repair, while moving at trans-sonic speed through an atmosphere just after takeoff, might develop burbles over some flaw and be jolted far off its aimed course to be lost in the frictionless void.

Well, that was a chance to be taken. The youthful crew could probably be impressed into service easily enough. Another thing bothered him though—not so much a thing of guilt as of vast failure.

At dawn the storm still screamed, undiminished. Doc arrived. Both Rube and he had been excused from work to bring Joan out of Suspended. Tensely Rube watched her after they had put her down on the bed.

CHAPTER VIII

Attunement

HER eyes opened. She gasped, smiled nervously, said, "Why, R u b e ! How? Where?" Her gaze wandered puzzledly around their narrow pullman-style quarters, lingered on the plastic table with the upholstered seats, on the white food-chest with the fanciful gnomes decaled on it—frivolities that tried to mask grimness.

Then her eyes roved to the window, heavily glazed to resist pressurizing. The Martian hurricane was out there, the rusty daylight, the weird unearthly growths, dim through the murk.

Rube saw how her eyes took on that wild look of a cat that fears being thrown into a fire—something of immeasurable miles and of soul-disorientation was in it. It was mild compared to what he had seen in others. But then she had been awakened under gentler, more ideal conditions. And maybe she had more courage than the average.

"Rube!" she gasped and it was like a protest that wrung his heart because she was his. She was another poor creature, scabbed and terrified and lost. Rube whispered endearments and held her shoulders gently to the bed.

Doc Warren administered a sedative and left, saying, "See you later, Rube."

Joan cried a little. Because it was her

way to be optimistic, she said, "I'm sorry to be such a baby, Rube. I suppose everything will be all right." After awhile she slept. And after another while, because it was necessary, he left her alone.

His friends and he acted at one by the retarded clocks that were in use on Mars. They had the outlaw's advantage of ruthless surprise attack. More than a third of the young personnel of the camp, men and a few women, were unhelmeted in the messhall, eating listlessly. Thirty-five persons, all armed.

Rube regretted treachery but what other way was so sure? He nodded a greeting to the guard outside the entrance and then, with a quick blow of a heavy chisel, cut the fellow's plastic face-plate wide open, leaving him to gasp helplessly in the dead Martian air.

He pressed the button which opened the outer door of the airlock and a second later thrust his little piece of copper into the safety device which prevented the inner door from being opened at the same time, short circuiting it.

Then he pressed the control of the inner door and threw his own weight against it, afraid for an instant that it would not yield against the air-pressure in the messhall itself. But these great valves were power-driven. With both doors open the air of Earth-density whooshed out.

That would have been enough without the strangling wind-blown dust that intruded a moment later. Doc and Hardy had both been in the messhall, waiting. They had redonned their helmets just in time, warned by the faint noise Rube had made at the airlock.

Now they relieved the victims of their ionic pistols while Rube dragged the hapless guard inside, withdrew the copper slug, closed the lock's inner door and spun a wheel-valve which released air from supply tanks to replace quickly what had been lost.

"Mission accomplished here—no serious casualties," Doc breathed gratefully for wasn't it true that these young people had rescued them from the damaged spaceship and since, for the most part, had treated them kindly?

"Guard them, Doc," Rube ordered.

Their arms full of pistols, Hardy and he left the messhall to meet and distribute weapons to their fellow insurgents who had gathered now, just outside.

They scattered through the storm-murked camp, where no general alarm had been spread. Again they had the advantage of the attacker who knows he is attacking—that against surprise, questioning and momentary uncertainty. Most of the rebels had two pistols—weapons that ionized a thin path of air, making it a conductor along which a silent stunning bolt of electricity flashed.

In less than ten minutes the rebellion had gained complete success. Many of Roland's young people—Cousin Helen Sands, caught at her post in the hospital, included—surrendered with a shrug and a grin. "So now we know what happens—eh, Gramps?" Helen commented.

Carl Roland was unaware that anything had happened until pistols faced him in his office.

"We're in control," Rube told him quietly, not feeling the gratified fury that he had expected to feel. "You will not be harmed. Within a week, perhaps, we'll leave—as soon as the spaceship can be as perfectly repaired as possible. You may come with us or wait for the relief ship, due in a month."

It was interesting to watch Roland's thin youngish face pass through phases of fear and rage until his eyes gained a calmer more-lucid light and a strange surprise.

"Now *you* have the responsibility!" he snapped. Then he began to sob. He trembled violently. Perhaps it was the throes of a man's dealing with his ego and his faults and growing up. Somehow the sobs sounded humble—and relieved.

"Hospital!" Rube ordered his henchmen.

NO less interesting were Rube's own feelings. The tension of needing to revolt from an oppressor in impossible circumstances was out of him. He had gained his immediate objective. The driving need for haste was gone. In him there was an embarrassed and slightly

guilty peace. Perhaps in part it was the democratic principle functioning. He was free. No one was telling him what to do.

"Might as well let our young captives out of the messhall," Hardy offered. "As long as they're not the ones with the weapons. Practically all of 'em on our side in their hearts anyway. Okay?"

Hardy looked puzzled, genial, a bit swaggering. He also looked slightly comic—as all of the rejuvenates must by now—with darkening fuzz on his pate and his cheeks turning young and fresh, the last peeling skin almost gone. When his teeth really sprouted he'd be like a clever dead-end kid of twenty.

Rube shrugged. "Sure," he said. "Go tell Doc—"

Rube put on his helmet again. On his way to apartment 117 he stopped on inspiration at the supply office and discovered that he could get his and Joan's luggage—two hand cases.

As he hurried on all he really wanted to do at the moment was to croon over his wife, get her past the first awful shock of being on a strange planet, cook coffee for her, look after her.

So that was what he did. Except that he did notice that the storm was dying fast. The afternoon sun already shone red through it.

And after a while he heard Joan say, because she was valiant, "This little apartment reminds me of the first one we ever had."

Rube scowled to himself, his feelings in an odd tumult.

The week which followed was strange and rather miraculous. Repair of the spaceship moved slowly. It had to be done with care. But delay mattered less for there was no one to insist that the exiles remain on Mars.

On the other hand there was nobody to tell them that they had to go. Some of them railed, of course, at the slowness in getting started. But even the worst hospital cases of space nostalgia showed some improvement.

It was weird spring on Mars. The nights remained bitterly cold. But the sun, beating down from the ultramarine sky, raised the midday temperature almost to fifty degrees, Fahrenheit. There was a dusty haze on the horizon.

The Martian plants dropped their sere, tattered whorls and, drawing a little moisture from the atmosphere—it came from the sublimating Polar deposits—began sprouting fresh whorls, dry-seeming but of a fresh blue-green—except for one special leaf to each of the commonest plants. This was bright vermillion.

Could there be something so Earthly here as a flower, native to Mars? It was not a flower—it was a single petal, covered with little prongs. Call it a kind of flag.

And from burrows in the ground, in the deposited debris of many generations of vegetation, little two-legged quasi-insects crept as slowly as the hands of a clock for there was so little oxygen to give them life in the Martian atmosphere.

They say that all springs are magic. And there may have been magic here when one looked over the mile on mile of queer growths in the valley, something comparable to the view of pioneers, looking at a vaguely similar scene from a covered wagon.

Was there here beauty of a sort? Were there the mystery and challenge of vast expanses of unexplored territory? Could there be here even an earnest urge to build permanently—to own—to possess?

Rube Jackson's puzzling unrest increased. Several times, knocking off from work on the repair of the spaceship, he wandered out of Port Smitty with Joan, often with several of their friends.

Joan had brightened, as had the others though, under better conditions, of course more swiftly. Seldom did Rube have to chase the panic-devils out of her eyes by saying, "Only a few days more, hon," or at last, "Day after tomorrow, Joanie."

That was the late afternoon when a whole gang of people climbed to the ruins of the ancient city. That was the time when a real youth named George

remarked that you got used to wearing an oxygen helmet just as you got used to wearing boots.

That was the time when an Annie Riley stated that on Mars she was at least away from her daughter-in-law and that the tomato seeds she had happened to plant in a tin can in the glassed-in "back yard" of her apartment, had already sprouted.

That was when Joan really laughed for the first time on Mars, when Rube and some others became convinced at last of their own great ingratitude.

That was when, from a thin pearly veil of cloud from the Pole, a few fine dry flakes drifted down. Joan caught two on the palms of her space mittens. She stared at them wonderingly, as if they were a part of home, as if they didn't belong here at this distance from Earth at all.

"Star-shaped," she said. "Just regular snowflakes. Of course it has to be—here or any place. Out to the farthest Earth-like planet in the farthest galaxy." Then she laughed—with real pleasure. "I hardly believe it—on Mars!" she added.

"Umhm-m, Mrs. Jackson," Doc Warren mused. "Ice crystals form according to the same basic laws everywhere. Everywhere one finds the same elements, the same basic forces. It may be hard to grasp but that much of home a human being can find as far toward the rim of the universe as any vehicle of his will ever take him. It's hard to realize but true."

"Knowing that is a little like being given the universe, isn't it, Dr. Warren?" Joan remarked. "Being set free from the space nostalgia. As I think somehow we are free—already. Though space nostalgia was terrible on the moon and here. Can you explain?"

DOC looked embarrassed. "I believe I can," he answered. "I have said that human well-being is dependent on finely balanced factors—or words to that effect. Here at Port Smitty there is already a suggestion of real community living such as does not yet exist among the transient minors on the dead moon. Man, being a social animal, finds this pleasant.

"There are several other forces acting against space nostalgia here—and now. But one towers over all its competitors. It is the fact of, vita, and what vita means. After the first shock of being stranded in so strange a place as this has worn off it comes into play. The mere knowledge that you are alive and in no great discomfort and can foresee living on is enough to lift the spirit out of the doldrums.

"You have another lifetime ahead—perhaps many lifetimes. Time or prison or hardship don't matter. The mind begins to soar. You feel as though you've been part of something big that should be matched by other bigness. Progress, the answering of Earth's greatest problem, the building of the future, something of immortality—and of the stars. . . ."

Doc's words had become flowery and oratorical. His voice quivered with emotion. But Rube did not smile. His feeling of guilt and of ingratitude, which he had begun to understand during the last few days, was plain to him now. Whatever other faults Roland had, his dream was possible and it was full of promise.

The man did not matter but the dream must be upheld. Rube's thoughts rose with it. He looked at his wife and she nodded. As part of the future he remembered how pretty she had been and saw how pretty she was going to be again. Old youthful adventure and fire surged in him. Memories of Earth were still pleasant but they were dim.

"It looks as though Doc wants to stay on Mars," Rube drawled, grinning. "It looks as though Joan and I are staying."

"I'd be a chump to leave when all my friends are here." Orville Hardy chuckled. "I wasted one lifetime. Who knows—maybe here I'll become a great archeologist—like Smitty?"

Porter Smith, who stood near in patched clothes and battered helmet, only grinned his cynically gentle grin.

"Besides," Hardy added, "It's still against the law for us to return to Earth. I'm law-abiding when I can be!"

Cousin Helen Sands said, "May I make my earnest contribution? As soon as there's a real town or two—as soon as Mars takes on a human touch—I'll bet there'll be immigrants of all ages, not just rejuvenates. So the law'll be changed. Meanwhile I'm staying."

"So we'll have a showing of hands tonight in the new rec-hall," Doc offered. "A few people, I think, will have to be sent home on the relief ship, law or no law. They can't fit. Many of the young people will want to go."

"Not as many as you think," George retorted. "Remember that most of us teethed on the idea of traveling to other worlds! We've as much pioneering spirit in our blood as most of you!"

When they had all returned to camp, Rube went to eat crow. But not even the idea of humbling himself slightly before Roland, could depress him now.

Roland was still in the hospital.

"Most of us, I believe, are staying here, Roland," Rube offered rather stiffly. "Just as you wanted—and just as most of us seem to want—now. I hope you will forgive me for the mutiny—though it seems to have had a psychological value, helping to clear the atmosphere. So much for my defense.

"You're free—we've all had a lot of trouble. I appreciate the problems you faced—they were awful. The thousands of people still in Suspended, I suppose, will be revived in small groups, as originally intended."

For a second Roland's lips twitched as with fury. Then he shrugged and his eyes lighted eagerly as if now he had become a whole man. Rube had the strange feeling that they were two men who had both made mistakes but who had both helped to accomplish something great, something that had been really the achievement of many people.

"It was the accident to the spaceship and having almost two hundred rejuvenates to take care of before we were ready for them that was so bad for me," Roland confessed humbly. "Telling them what they had to do and making them angry in the hope that it would blast them out of the awful reverie phase of space nostalgia was my conscious tactic —not a bad one, I still think.

"But I lost my nerve and went to pieces because I was responsible, and because I had the nostalgia, myself. Your rumor of return to Earth was the only thing that gave them the hope that carried them over the rough spot.

"I think I was wishing for a revolt subconsciously, for the relief from responsibility that it would bring. Being thus overpowered I couldn't be blamed so much for failure. Of course I meant to return to Earth—but now, if I am still useful, I will stay. I feel ready to leave the hospital."

Rube was surprised. He had a great deal better opinion of Dr. Carl Roland.

The meeting that night for a show of hands turned into a party there in the new rec-hall. Outside it was fifty below zero—inside, music and warmth.

Hardy danced with Helen Sands, teaching her the jive-stuff of his first youth gleefully. Rube talked with Doc Warren and Carl Roland about the construction work for tomorrow. Already Rube was the unofficial mayor of Port Smitty.

Joan pondered the birth of a new social question in a feminine manner while she watched Hardy and Helen dance. Should people with an age difference of a century between them be permitted to marry? Being tolerant, she shrugged and posed another question to the men.

"Will people really colonize other solar systems when ours is overcrowded?"

"Good night, Joanie—do you want to look ahead a hundred thousand years?" Rube laughed.

"Hmm—well, no," Joan chuckled. "Let's dance, Rube."

Out on the floor, however, he thought of snow falling on transgalactic worlds. And with all the wonders he'd seen happen already, who knew? Joan and he might even be living then if living hadn't killed them.

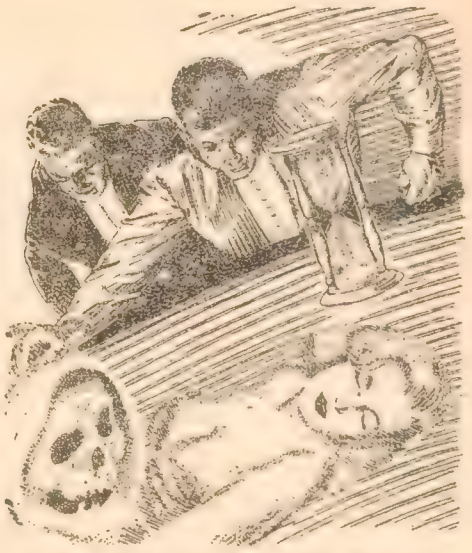
Only one present in the room was returning soon to Earth—Porter Smith, who played the violin for the company. But his trouble was different. He'd been too lonely for too long.

PRECOGNITION

by

MACK REYNOLDS

If you could see the future as did Paul Denison, would you make more of it than he did?



I must have ruined a dozen lives that week

SAUL BENSON charged through the swank office door and made a beeline for the sanctum. The receptionist, who had been hired for her majestic coolness, blinked twice but had time for nothing more before he was past her. He burst into a room that was as far removed in appearance from an office as was his own Beverly Hills mansion from a home. There wasn't even a desk in it.

He confronted the sad looking young man who was sitting in a tremendous armchair. "Are you this guy Poul?"

"Sit down. I see you are Mr. Benson. My name is Paul Denison. My manager figured out that Poul stuff. I think it's rather silly, myself."

"I'll stand, fortune teller," Benson snarled. He wasn't disconcerted by the fact that the fellow knew his name; there were a dozen ways to explain a cheap trick like that. "What I want to know is, what did you tell my wife?"

Paul Denison had weariness in his face and in his voice. "I didn't ask her to come here, you know. Persons as high-strung and temperamental as your wife should stay away from—" he grimaced wryly— "fortune tellers."

"She's usually got more sense, but half Hollywood is raving about you. She finally came just to be able to stay in the conversation at her bridge club. What did you tell her?"

"Nothing."

"You mean you deny she was here?"

"Mrs. Benson was here yesterday morning, but I informed her I could tell her nothing."

Saul Benson snorted. "And what did it cost her for you tell her that?"

"Nothing."

"I get it." His eyes narrowed. "In the long run it's better publicity for you to turn away a celebrity like Lucy. The word spreads around that you could do

nothing for her and refused to take her money. It makes you look like less of a crook."

DENISON smiled bitterly. "Mr. Benson, I am not a charlatan. Besides, I don't need the publicity; I have film personalities come here daily who are as prominent as your wife."

Benson slumped into one of the room's chairs and held his head in his hands.

"I shouldn't have said that. I don't want to antagonize you, no matter what I may think of your manner of making a living. The thing is, my wife is extremely upset and she was to begin a new picture on Monday. I've got a considerable sum tied up in this production and it'll cost thousands to have her away from the set. Actually, I've come here for your assistance."

"There is nothing I can do, Mr. Benson."

"Let me get this straight. When my wife came here, yesterday, just what did she expect?"

"She expected me to tell her something of her future."

"And you told her it was no dice." The producer got to his feet and rubbed his hands together. "This won't be difficult at all, you can do it over the phone. Just give her a ring and say something to the effect that you've dreamed up the fact that she'll cop the Academy Award this year. Of course, I'll make it worth your while."

The fortune teller shook his head slowly. "You don't understand, Mr. Benson. I don't want your money any more than I wanted your wife's. You insist on believing me a faker, thinking that persons who claim to see into the future are just that. Ordinarily, you would be correct, but in my case you aren't. I have the ability to exercise true precognition."

"Nonsense. If you could, you wouldn't be here telling fortunes for neurotic women. You'd be down at Santa Anita cleaning up on the races."

"Possibly I could do that too if I wanted, Mr. Benson. It doesn't appeal to me."

The producer sneered. "A man who could see the future would have the world by the tail. If I could do it, I'd rule the country in five years."

Paul Denison stared at his fingertips for a long moment. Finally he said, "Let me tell you a story, Mr. Benson."

* * * * *

Approximately ten years ago (Denison began) the first really serious investigations into the possibilities of precognition were made. At the time, I was a junior at a mid-western college that had been conducting Extra-Sensory Perception tests for some years. The whole student body had participated in them and my record for both clairvoyance and mental telepathy was considerably higher than average. Not that I was particularly interested in ESP; I was studying architecture and the tests seemed to me less than practical. However, I was willing to cooperate with Professor Moselle and his assistants.

When their tests on precognition began, once again I averaged out better than the other students. I was able to "guess" what cards would come up more than was mathematically probable. Nothing phenomenal, you understand, but more than would be possible by mere chance.

Once again, as in the clairvoyance and mental telepathy tests, I wasn't particularly interested. Ordinarily I probably would have gone on with my studies and forgotten the matter. But one night, while I was working late for an exam, Professor Moselle came to visit me.

He got right to the point. "You're not really interested in the University's research into ESP, are you, Denison?" he asked.

"Oh, I'm interested," I told him, "but my subject is architecture and it's a full time proposition if I'm going to get through as soon as I'd hoped."

He hesitated for a long moment, then said, "Nevertheless, Paul, I'm going to ask you to do me a favor. It's really beyond the call of duty, so to speak."

I already didn't like the sound of it but I asked him what he meant.

IT TURNED out that Professor Moselle had developed a theory in regard to the location of those portions of the brain that control ESP. He had found, by the way, that the equivalent portion of the brain was larger, proportionately, in some animals, the homing pigeon, for instance, and the lemming, than it was in humans. I told him that this was very interesting but asked how it applied to me.

He hesitated again. "Paul, I believe I'm on the verge of one of the greatest discoveries in the investigation of the mind. I want you to help me make this discovery."

"But, professor, I'm not a student of psychology. I'm a would-be architect." I glanced in despair at my open books, but he failed to take the hint.

"Paul," he said. "I'm of the opinion that I can step up ESP to a remarkable extent by artificially stimulating the portions of the brain to which I am referring. I believe a simple hypodermic injection would increase your ESP to such a degree that the world could no longer close its eyes to the existence of the phenomenon."

"But why me, Professor Moselle? You have students who have shown more tendency toward ESP than I. Why, Dave Hardnick ran a score almost twice mine on mental telepathy; and Mary—"

"The thing is, Paul, that although you aren't spectacularly high on any single phase of ESP, on an average you are the highest. In mental telepathy, clairvoyance, precognition, and even psychokinesis, you show above normal scores. I think you would be my best specimen for the experiment."

I shrugged. "All right, professor. I'll be over to your laboratory in the morning."

"If you don't mind, Paul, I'd like to make it this evening. This attempt is so radical that I'd like to keep it under wraps until I have some more data. Frankly," and his grin was boyish, "I'm afraid of making a spectacle of myself."

The upshot of it was that we went over to his laboratory that night. Evidently the old boy had been pretty sure of me. He had everything all ready for the experiment.

He used a local anesthetic first so I wouldn't feel the deep prick of the hypodermic needle, which he had to place exactly where he wanted it. Then he stood back and wiped his forehead with a handkerchief.

I grinned at him. "How long does it take to become effective? Should I be telepathic when I wake up in the morning. There's a blonde in my English class whose mind—"

He wasn't amused. "It should show effects immediately, Paul. You can't read my mind can you?"

I shook my head. "Sorry, professor, it's a blank as far as I'm concerned."

He smiled wryly. "I probably deserve that, although I hope you didn't mean it the way it sounded. Let's try some of the experiments."

He tried me on the ESP cards for telepathy and clairvoyance but my average was about the same as ever. Then we tried psychokinesis with the dice, but with even less than usual result. To say he was disappointed was understating it considerably. I avoided looking into his face. I felt sorry for him in his failure.

I went over to the mechanical card shuffler and idly flipped the device which we used to test precognition. I noted the coincidence when I guessed the first one and the second. *I stopped breathing momentarily when I guessed the third.*

"Professor," I grated. "Come over here, will you?"

It didn't take long to check. I guessed the whole deck twenty times straight. An utter impossibility mathematically, of course.

He stared at me and I at him. "This is so new that I don't know where to start," he said eagerly. "I'm afraid to let you go until tomorrow. If I do, the effect might wear off and I can't be positive that I can recreate it again."

I grinned. "You promised me this would be interesting and I'm beginning to believe you. What do I do first? If I'm able to exercise precognition, then I should be able to see our futures,

shouldn't I?"

"I don't know. Not necessarily. Can you? What's going to happen to me in the next year?"

And all of a sudden I knew the answer to his question.

I blurted it out. "Within a month your wife and son will die in an auto crash caused by drunken driving on your part. You will commit suicide by taking an overdose of sleeping pills that same night."

His eyes nearly started from his head. "You're insane! I don't even drink."

I shook my head dazedly and stared back at him. Cold fingers searched up and down my spine.

"I'm sorry, professor," I mumbled. "I don't know why I said that. Rather a poor idea of a joke. I think I'd better go back to my room. I'm feeling a little dizzy. Probably the after effects of the injection."

HE MUTTERED some conventional phrases after me, still white and shaken, and took me to the door. I've often wondered since what he thought that night as he lay in bed.

Sometimes I wish I could relive those next few days. You see, the stimulus didn't wear off. I continued to be able to see almost everyone's future, and I was too confused myself; it was too new for me to handle.

Before I knew what I was doing, I let my roommate know he'd get married before finishing school and have seven children by the time he was thirty. He'd take a job in a garage to support them, working part-time after hours as a cab driver. Bob had wanted to be an architect too.

Then there was Marcy, the girl I was going with at the time. When she heard the stories of my looking into the future, she insisted I tell her what I saw in her life. One night I got a few too many beers in me and told her. She never spoke to me again. Marcy had always been too affectionate by nature—but I should never have told the girl where it would finally take her.

There were others. I must have ruined a dozen lives that week. You see, practically nobody ever lives to see his dreams come true; but it ordinarily doesn't make much difference. The dream we had last year is forgotten this year and we have a new one to take its place. Just about everyone finds an average of happiness and satisfaction in life—if he isn't told in advance that none of his dreams are to come true.

Bob probably would have been quite happy with his large family and his work to keep it going. But looking forward to it, and seeing the plans he'd made fold up, his life turned sour.

Possibly even Marcy would've found a percentage of the enjoyable things in life, even while taking the trail downward, if I hadn't let her know, as a twenty-year-old girl, what her ultimate fate was to be.

At any rate, shortly after the tragedy which ended in Professor Moselle's suicide, I left school and came out here. I finally struck on this as the easiest manner in which to make a living without hurting anyone with my powers. If someone comes to me and I see disaster in his future, I simply say that I can tell him nothing. I send him away without revealing anything.

* * * * *

Saul Benson had slowly relaxed as the other's story unwound. Now he sat up suddenly.

"And you told Lucy that you could do nothing for her? No wonder she's upset. She probably thinks you saw something bad in her future and refrained from telling her."

Paul Denison ran his right hand back through his hair and down his neck. "I did, Mr. Benson. You are her husband, perhaps it is only fair that I tell you this. You came here because you were worried about your wife not being able to work on your new film which is to begin Monday. Unfortunately, your wife won't live to see Monday."

"Are you crazy? Lucy is in perfect health!"

The seer didn't answer.

The producer took a snowy handker-

chief from his coat and dazedly wiped his mouth. He said, as though he didn't care whether there was an answer or not, "Why not clean up on the stock market?"

Paul Denison stood up and walked over to a window. "How long do you think there would be a stock market if someone with my powers started operating? Every stock exchange in the world would fold up, when the story got around, which it inevitably would, sooner or later. I haven't any special desire to upset the present economic system."

Saul Benson had lost his belligerence. He said slowly, as though he was thinking of something else, "I can see that. The same applies to horse racing. It'd ruin the sport. Any gambling would stop being gambling if the guy playing knew what was coming. It'd be robbery."

Denison turned and faced him. "There's another factor, too, Benson. You see, although it's true that I could amass a tremendous fortune by utilizing my precognition in the wrong manner, I have lost any desire that I had for more money than I need to buy me daily necessities and a few of the luxuries of life."

"I don't see why that should be."

The fortune teller looked at him apathetically. "You see, when I obtained the power to look into the future of others, at the same time I found myself able to view my own."

They sat silently for a long moment. Finally the producer got to his feet. He brought up one hand as though in supplication, then lowered it.

"I don't suppose there is anything about Lucy . . ."

The seer shook his head dumbly.

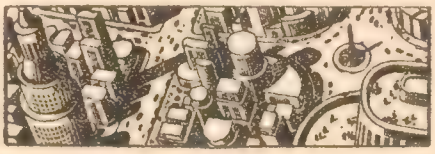
Saul Benson's face was pale. "It's going to be strange out here without her. This crazy town was bearable when we were able to laugh at it together."

He started toward the door and then half turned. "I guess I could ask you what the coming years hold for me."

"If you wish."

Benson shook his head and turned again to leave.

"No. I guess not."



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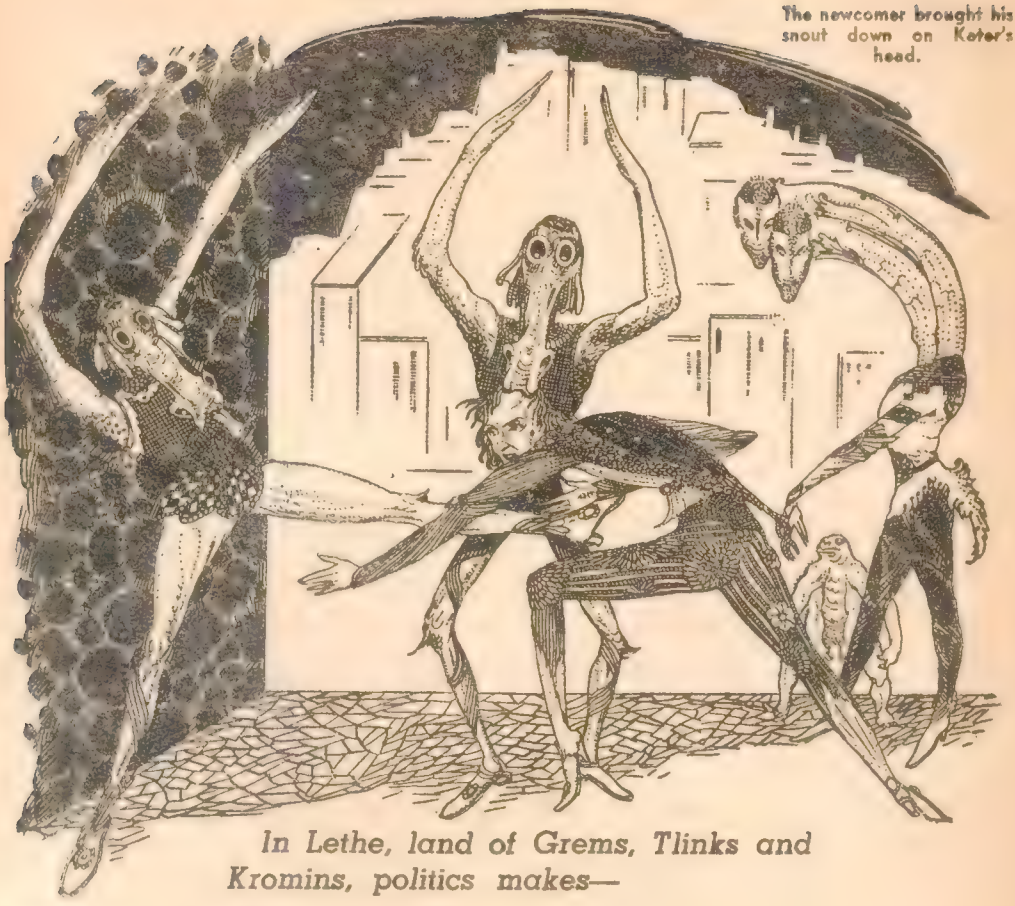

The newcomer brought his snout down on Kater's head.

In Lethe, land of Grems, Tlinks and Kromins, politics makes—

the Strangest Bedfellows

A LUMPLIKE Grem had just settled down on the doorstep of one of the Tlinks, and everybody was giving him a wide berth. The Tlink who lived there, a resigned expression on his octagonal faces, was hurriedly moving out his belongings as if in a desperate race against the inevitable. To Jim Kater, who had never regarded the Grems as anything but the mildest and most harmless of creatures, the sudden excitement caused by this one's actions was unexpectedly sinister.

"What's wrong with him?" he demanded. "What in the name of Mother Pluto is he going to do?"

"Commit *larito*," said Hlusan absently. "What you call suicide. Let us

By WILLIAM MORRISON

get away from here, and figure out what we must do. His action is going to complicate the election enormously."

"Wait a minute. If he intends to kill himself, we ought to stop him."

"Impossible. Once a Grem makes up his mind, he can will his death. The only thing we can do is give him plenty of room."

"What's he doing it for?"

"That is his business. Somehow, the Tlink has offended him. When a Grem is deeply offended, he commits *larito* on the doorstep of his enemy. That is the custom."

"To shame the enemy?"

"Not to shame him, but to make his life miserable and force him to move," explained Hlusan. He stared at the Grem anxiously. "He's a big one. We had better stay far away."

"When is the happy event coming off?"

"Usually within an hour of the time the Grem deposits himself. He needs time to brood over his wrongs and to gloat over the misery he intends to cause his enemy."

"What sort of weapon does he use?" asked Kater.

"As I told you, it is merely a question of will. No weapon is necessary."

Jim Kater gritted his teeth. "I can't say that I'm going to be upset by the death of a Grem I don't know. But if it complicates the election—that's another thing. There have been too many blasted events complicating the election already."

"Blasting event," mused Hlusan. "That is a good description."

"Not blasting, blasted. And what's good about it?"

"You shall see," promised Hlusan blandly.

"I'm afraid I shall. Frankly, Hlusan, the whole thing's slipping out of our hands."

HLUSAN answered in a tone that tinged with mild regret. "Ah, yes, an election is a very difficult thing to control. And if we lose," he added thoughtfully, "if I am not elected President of Lethe—I think you will die, my friend, will you not?"

"I think I will too. I'm glad to see that you take it so calmly."

"You are as a brother to me," explained Hlusan. "I look forward to your death not with pleasure, but with the same emotion of mild regret with which I would regard my own. Now let us try to think what use Corson will make or try to make of this Grem's passing out of the world, and perhaps we shall find a way to forestall him."

Ever since he had come here, thought Jim Kater, he had been thinking of a way to forestall Grant Corson. And on the whole, he hadn't been successful. Lethe, a tiny satellite of the icy planet, Pluto, had been a pleasant surprise to the human explorers who had first run across it. So far away from the center of the solar system that the sun was merely a small luminous orange-yellow spot in the sky, providing a minimum of light and heat, Lethe had none the less a warm climate, which came from active internal radioactivity. Somewhere inside it, heavy nuclei were breaking down at a sufficient rate to keep it livable. Fortunately, they were so far inside that in most places the penetrating rays failed to reach the surface.

In those places where there were outcrops of radioactive ore, the high energy rays were for the most part absorbed by native plants. With sunlight hardly brighter than starlight, photosynthesis had never developed. Lethean vegetable life, however, flourished very nicely on radio-synthesis. And though the atosphere was high in such gases as argon and krypton, there were still enough oxygen and helium around to make breathing easy. On the whole, Lethe was an unexpected oasis in what had formerly been considered a lifeless and desert region of space.

Its intelligent population had been just as surprising as its climate and plant life. There were three main groups, so different from each other that comparative biologists were unanimous in asserting that they were the products of a long period of evolution on far separate paths, perhaps even on different planets.

The Grems, most human in appearance though they were, would never have been mistaken for genuine human beings. They were squat furry lumps from which grew small heads, a single pair of legs, and two pairs of arms. Inoffensive and willing to cooperate with strangers, they would suddenly get into a huff for no reason that the average human visitor could see, and

toss monkey wrenches into the plans of every other group on the planet.

The Tlinks, on the other hand, self-sufficient and retiring, were easy enough to get along with if you simply ignored their existence. Tall and slender in appearance, they had alarmed the first human visitors by their resemblance to giant snakes rearing up to strike. They differed from snakes in having two heads with long octagonal faces, which never seemed to get in each other's way.

The mystery of the cooperative Tlink heads had long been solved, but still continued to make newcomers uneasy. The fact was that the Tlinks were telepathic among themselves. The evidence as to whether they could read the minds of other races was indecisive, but there was no doubt that one Tlink could communicate mentally with all the others. Hence the ability of each pair of heads to act as a unit in directing their common body.

The Kromins, to whom Hlusan belonged, were short, long-snouted vegetarians, with tiny ears and large piercing eyes. They were the most human in behavior of all the Lethean races, in both the flattering and unflattering senses of the term. They were aggressive, untiring in their efforts to assume leadership of the satellite, and generous to the other races when fortune favored their efforts.

They were the politicians of Lethe. Elections had been held on the satellite long before it had been discovered by human beings, and most political slates had Kromins running for the majority of offices. Electioneering, however, was in its infancy. The winning of an office was an honor, but little beyond that. Moreover, the results of elections were impossible to predict, and if poll experts occasionally became neurotics when they saw what voters on Earth did to their best estimates, they would have become raving lunatics if they had tried to use their straw-vote techniques on Lethe.

"Take a look at the figures of the last one," said Jim Kater. "Approximately fourteen thousand voters were eligible. Everybody had a right to vote, and everybody was interested. Actual results, twenty-one-hundred-thirty-five to twenty-one-hundred-sixteen, favor of the side that didn't have a chance. What do you make of that?"

"The Grems didn't vote," explained Hlusan. "At the last moment, something offended them, and they stayed away. Many of the Kromins didn't vote either. They were disgusted with both sets of politicians, their fellow-Kromins included. The only Kromins who turned out were those running for office, and their personal friends and relatives. Most of them were on the losing side."

"Then the election was swung by the Tlinks?"

AIRILY Hlusan waved his snout in agreement. "They made up a solid block of twenty-one-hundred votes."

"But that's impossible. There are only about a thousand of them!"

"A thousand and fifty, to be exact. But don't forget that they have two heads each. Two votes."

"That isn't fair."

"Yes, it is. In fact, we're lucky that they don't have three votes. The Tlinks offered the argument—you may find it familiar—that two heads are better than one, and that two heads cooperating telepathically can get better results than three separate heads on their own. But many generations ago, we rejected this claim as undemocratic, and limited each head to one vote."

"So each Tlink goes up and marks two ballots."

"Not at all. The Tlinks first have a telepathic discussion among themselves and reach unanimous agreement. Then one of them goes to the polls and casts the entire twenty-one-hundred votes."

"What a system! They must be able to control all the elections."

"Almost all."

"They'll be decisive in this one, anyway," said Kater. "We've got to win them."

Hlusan bobbed his snout up and down to indicate disagreement. "It's the Grems who will decide this one. Remember, there are eight thousand of them."

"But if they don't vote."

"This time I think they will vote," said Hlusan.

Kater nodded slowly. Yes, this time the Grems were interested, and they had Grant Corson to thank for it. Corson had landed here on Lethe from his space-cruiser, a clear-eyed, charming individual from a family that for several generations had enjoyed both wealth

and position. Corson had long ago forfeited the position, and had now run through most of the wealth. Two years before he had been kicked off Mars for a supposedly charitable gambling scheme in which he had involved a good part of the red planet's upper social crust. Charity hadn't profited, but Corson had, until he in turn had lost the money to a gambler slightly more skilled than himself.

It was a stroke of bad luck that had brought him to Lethe. It was worse luck still that had brought about the discovery of rare mineral deposits, at about the time the same minerals were practically exhausted on the better-known planets. Corson had seen a chance to recoup his fortunes, and for once, by what seemed like honest means.

But he couldn't stick to honest means for long. The mineral deposits were a Lethean government monopoly, and the profits they yielded were supposed to be used solely for the improvement of the satellite. The government pointed this out, and refused him a concession. Corson found this official attitude highly inconvenient, and he didn't propose to tolerate it. His remedy was to change the government.

As a result, he had taken an interest in the coming elections. He had tried to bribe Hlusan, and been kicked, in the literal sense of the word, out. He had been more successful with the opposition slate. If they won, he would have his desired mining concession, and his creatures would be rich by Lethean standards. If they lost—no bribes. They *had* to win.

As for Jim Kater—well, Kater had made the mistake of trying to dissuade the Kromin politicians from accepting Corson's offer. Kater, as the operator of a trading post on Lethe, had come to have a respect and liking for most of the native inhabitants, and little as he sometimes thought he understood them, he didn't want to see them robbed.

When Corson had learned of his interference, he would cheerfully, in his gay and charming manner, have had Kater murdered. But Kater had friends, and the Lethean government now in office had strangely strict ideas about murder. It would have caught the criminals, raised an Interplanetary outcry, and the whole purpose of the killing, to secure a monopoly on the desired minerals, would have been defeated.

Corson had been forced to put off his revenge on the interfering Mr. Kater. But not for long. He knew, and Kater knew, that once Corson's slate had won the elections, there would be no difficulty in passing whatever laws were needed to make Kater's mere existence here a crime.

Kater wouldn't be able to get off Lethe, as no ships were due for some time. He would therefore be thrown into a jail—a harmless enough jail by Leathean standards, with a charming view over a luminescent garden. But the luminescence was due to radioactivity, and a short exposure to it would be more than enough for any human being.

Hence, when Kater fought for the victory of his side in the election, he was also fighting for his life. And summing up the results of the campaign thus far, he knew that he was losing. The final result was as yet by no means certain, but there was no question about the trend. He was losing.

CORSON'S career had included a short spell of Terrestrial politics. He had brought with him to Lethe a complete assortment of political tricks. Like Hlusan, he had decided that the key to the elections lay in the hands of the Grems. He had further decided to do something about it.

He had organized a Grant Corson Grem Mutual Social and Political Organization—the fact that he done so was itself a minor miracle, for the Grems did not lend themselves readily to organization. Several Grem henchmen, under his orders, had done the actual work, but Corson had supplied the political know-how, the material for the athletic games, and the little packages of radioactive plant food for indigent Grems. He had umpired at one of their games—a slow and peculiar affair in which nothing happened for long periods of time, and then suddenly a burst of activity would seize every Grem on the field and send him scurrying madly around.

He had even kissed Grem babies—and that was a sight, to see him fondling a furry, squalling infant which had no idea of what was happening to it, two of its arms clutching Corson by the

throat, the other two stretched out toward its baffled parent. But his Grem henchmen had explained the baby-kissing as a gesture of good will toward all Grems, and undoubtedly, Corson had won votes. There was little doubt about it, the majority of the Grems were on his side, possibly enough of them to swing the election by themselves. Even if his opponents got all the Tlinks and the majority of Kromins, they wouldn't have enough to win.

So far, however, they did *not* have the Tlinks and the Kromins. The Kromins were fairly evenly divided. The Tlink group kept its telepathic opinions to itself, and gave no indication whatever of where its vote would go. It looked like Corson's election.

From the distance at which Kater and Hlusan stood, the Grem squatting on the front porch seemed to swell. A second later, he disappeared in a burst of flame. The Tlink's deserted house rose in the air, split into a myriad of blazing fragments, and began to fall around them like a fiery rain. Hastily, Kater and Hlusan backed still further away.

"So that's *larito*," said Kater thoughtfully. "He just wills to explode—and explodes. I live and learn."

"It is, as you say, a blasting event," observed Hlusan dryly. "And if it happened very often there would be no Grems left. They do not breed very rapidly, and therefore they take their lives only when seriously offended."

"And when one of them does it," came a lazy, cultured voice, "that offends the others."

Grant Corson was smiling at them. Kater grunted. "Come on, Hlusan. The *hoi polloi* are beginning to crash the place."

"Take your time, Kater," remarked Corson. "I won't contaminate you by my presence."

"You've done it to everyone else you've ever associated with."

"Only to people I like. Not to those I pity, like you. Kater, why don't you leave this satellite?"

"Can't. I make a living here. Besides, there's no ship."

"I have a cruiser I'm willing to place at your temporary disposal."

Kater laughed harshly. "Accidents happen on your cruiser, Corson. No, thanks, I'll stay here and cast my vote like an honest citizen."

"You haven't a chance, you know," drawled Corson. "Especially after this incident. You may not have heard, but the rumor has been spread among the Grems that the lad who committed *larito* made a bad mistake. He had really no quarrel with the Tlink whose house he destroyed. His real enemy was you. You had the Tlink insult him."

"The Grems wouldn't believe that."

"But they do believe it. And they're very angry about it."

"Aren't you exaggerating, Mr. Corson?" said Hlusan pleasantly. "If the story were convincing, it would have convinced the Grem who was insulted. He would have committed *larito* on Mr. Kater's doorstep, and not on the Tlink's."

"I don't say that they're *all* convinced," admitted Corson. "Merely the majority of them. The one who killed himself was in the minority. Now the minority is even smaller."

"It will grow, Mr. Corson. Moreover, the Tlinks, with their telepathic sense, know what is in your mind. They will vote as a block, on our side."

"You think so?" Corson laughed. "Then keep your eye out for what happens tonight. It's election eve, you know. Be around at eight o'clock, Earth time."

He sauntered off, waving gaily at them. Hlusan's snout wrinkled in thought. Neither he nor Kater were up to Corson in this matter of petty politics. They could only wait and see what would happen, with the unpleasant conviction that no matter what it was, it would be disastrous for their side.

WHAT happened was the greatest and most resplendent political rally that Lethe had ever known. A Kromin orchestra started it off, hands and snouts sweeping across the metal bands of native instruments in a monotonous but irresistible rhythm that had the listeners swaying with it almost from the moment its strains began. The Grems looked on curiously—they were immune to musical feelings. But every Kromin in the crowd was affected, and at the edge, a lone Tlink was almost in ecstasy. His two heads coiled and uncoiled, dancing about each other on long necks with sinuous grace.

Other Tlinks gathered near, summoned telepathically. To give them

time to arrive, Corson made a speech—a speech which said nothing, and might have been an almost exact repetition of an election speech he had given on Earth, with only a few key words changed. He spoke of the glorious traditions of Lethe, of the g-g-great democratic institutions of the people of this splendid satellite, of the need for preserving these traditions, of the danger from those who wished to destroy them, of the importance of everyone's keeping his head—or his two heads, as he added with the broad humor of an aristocratic politician condescending to speak to the common folk.

His voice was musical, and the Tlinks, whether or not they understood the essentially meaningless words, liked it. As he finished speaking, his henchmen began to pass through the crowd, handing out small thin rods. Each Tlink was tactfully given two, one for each head. When all the rods were distributed, Corson ordered them held high, and threw a switch. Each rod burst into flame, revealing the fact that it was simply a torch. The Tlinks, for the first time in their lives, were to have the pleasure of taking part in a torchlight procession.

They seemed to enjoy it even at first, but when the music began, and the procession turned into a wild dance, they went almost crazy with delight.

"Why, the snaky fools," said Kater with disgust. "That Fourth of July spread eagle oratory and those torchlight processions stopped working on Earth long ago. I thought the Tlinks would see right through a simple act like Corson's."

"We have over-estimated them," admitted Hlusan.

"They fooled us by their telepathic sense," agreed Kater. "What if they can transmit thoughts to each other? The thoughts are of low caliber, and not worth thinking in the first place."

"Moreover, if the Tlinks know what Corson is up to, they don't seem to care. They'd rather sell their mineral birthright for a mess of—what is your phrase?—bread and circuses."

"They won't get bread," said Kater grimly. "And the circuses they'll have to put on themselves. But Corson's going to talk again. Let's see what he's up to this time."

This time there was less vagueness in Corson's speech. "My friends," he said sonorously, "my very good friends, you have just had a foretaste of what my victory in the elections will mean for the people of Lethe. Lethe has been an impoverished and miserable satellite of a cold and dreary planet. When the party to which I have the honor to belong takes over the government, it will be so no longer.

"Yes, my friends, the natural resources of Lethe will be used for the good of all. The income brought by its rare minerals will be spent on free music and free torches for every individual. No more will you endure the dreary life you have suffered under previous administrations. We shall curb the power of greedy politicians, make them disgorge the loot of which they have robbed you. We shall make them dance to your tune, instead of you dancing to theirs!"

In the emotional state which the Tlinks had reached, it was an effective speech. From the more than two thousand throats of the Tlinks burst forth a wild shrill cheer, to which a bass was supplied by Corson's Kromin and Grem stooges. The few other Grems present, completely untouched by the music, stood around without comprehension, and watched in growing bewilderment.

Kater and Hlusan looked at each other wryly. "He has promised something to everybody," said Hlusan gently. "There, my friend, goes our last hope of winning the election."

"And my hope of staying alive. Corson's been on the ball. He's learned something of the psychology of the different races, and taken advantage of it. We've been here longer, we should have known more—and we haven't made a bit of use of our knowledge."

"That is to our discredit. We deserve to lose."

"Still, no election is over until the votes are counted. It's possible that Corson has made a few mistakes."

"Mistakes?" said Hlusan. "He has the Tlinks, the Grems, and most of my own people. What are his mistakes?"

"He didn't really need the Tlinks. The Grems were enough."

"There is no harm in making doubly sure."

"Sometimes there is," replied Kater

thoughtfully. "At any rate, I want to show Corson that I'm a good loser. Think I'll congratulate him."

BUT as he walked toward the man, an officious Kromin, probably proud of his position as a bodyguard, stepped in his way. The Kromin shoved, and Kater didn't like to be shoved. He put out both hands, caught the Kromin off balance, and threw him back. The Kromin bounced off a wall, while another Kromin ran toward them from the side. The newcomer swung his snout and brought it down on Kater's head. Kater's fist caught this opponent high up on the head, near the mouth, and the Kromin shrilled in pain.

"My good man," said an amused voice. "Is this display of brute force necessary?"

The Kromin drew back. Kater caught his breath and grinned. "Not at all, my not so good man. I was simply coming over to congratulate you on tonight's performance. Your assistants, unaccustomed to tea-party manners, misunderstood my purpose."

"You wanted to congratulate me? You're a better sport than I thought, Kater."

"Have a drink on me."

"Sorry, old boy, I don't imbibe the native stuff. As an old toper, I prefer Terrestrial Scotch. Private stock, you know. Would you care to join me in a toast to the victorious party?"

"With pleasure," said Kater. "I've always relished the thought of drinking to my own funeral."

Corson poured the liquor. "I'll make a nice speech over you."

"I'm sure you will." He lifted the glass. "To your skill as a maker of speeches."

"Thanks, old fellow." Corson smiled. "You know, this toast isn't going to make any difference in our, shall we say, friendship?"

"Enmity would be the better word."

"I'm afraid it would," agreed Corson suavely. "That jail is getting lonely waiting for you."

"I hope you've selected a nice burial plot."

"A beauty. No radioactivity at all."

"You're very thoughtful, Corson. I'll tell you later about my plans for filling it."

From a distance several Kromins and a pair of Grem henchmen had watched them frowning. After the third drink, Kater said, "Thanks for that Scotch. You and alcohol together have a rare ability, Corson. You can make me feel friendly towards every one, even you." He staggered slightly as he left the man. But near the Grems, he stopped, and said, "You can draw your pay tonight. We don't need you any more."

A Grem said, "What?"

"I said—" and then Kater caught himself. He smiled. "Excuse me, you're not supposed to take orders from me. Forget that I said anything." And he staggered away.

He saw the Grems face each other, eyes upturned in what was their version of a frown, and he smiled again. There were a few things about their psychology that Corson had overlooked.

The voting was scheduled to begin at seven the following morning, which meant that Kater had about eight hours to work in. Fortunately, the Grems slept rarely, no more than once or twice a year, and then for periods of as much as ten days at a time. They would be up, ready to listen to last-minute electioneering.

By three in the morning, he had done his work, and from then on it would be up to the Grems themselves. But a man in danger of losing his life can't take things for granted. He yawned sleepily, shook himself, and moved wearily on to a new group of Grems. He was glad to see that among them was another of the political henchmen Corson had hired.

By the time the polls opened, he was exhausted. He voted, and went to bed. Let Corson get out the vote himself. He could trust the man to do that efficiently enough. When it came time for the actual counting, Hlusan and Hlusan's few faithful followers would awaken him, and they would make sure that there was no fraud.

The first votes counted were the Tlink block—a solid 2100 for Corson's slate. Corson himself was there, suave and self-possessed as usual, but a little nervous underneath. This mining concession meant a great deal to him, and he lacked the completely iron self-control that would have been needed to stay away and let his underlings bring him the final count.

After the Tlinks, the other votes were at first scattered. Slowly, however, a trend began to appear. At the end of the first hour of counting, the 2100 lead had been overcome. By the end of the second hour, the result was conclusive. All those Grem votes which Corson had counted on as in the bag, had simply slipped out of a hole in the bag—a hole which he hadn't even known was there, and landed on the other side.

THE man's face was white, his nostrils pinched as he saw the count pile up against him. "Seems that my congratulations were premature," murmured Kater. "Guess it's my turn to be congratulated."

Corson turned on him with a snarl. "You cheap politician, I don't know how you've done it, but you've double-crossed me!"

"If by cheap you mean that I haven't spent any money on this election, you're right, Corson. But I haven't double-crossed you. You've turned that trick neatly yourself."

"You've bought off my men!"

"I didn't buy them. They simply figured that you sold them out. You see, Corson, they don't have charming manners, and they're not good sports. There are certain things they find it impossible to understand."

"What have my manners to do with it?"

"When you stab a man in the back, you like to do it with a pretty smile. They don't understand that. When I came over to congratulate you, and you accepted my congratulations so graciously, you were taking part in an act that confused them. And when I left you and told your tame Grems that they might go over and get their pay —I think they began to acquire ideas."

"You told them that?"

Kater laughed. "Don't be so outraged, Corson. Having seen us so chummy, they naturally began to think that I too was in your pay, merely pretending to furnish opposition. When I seemed to be giving them orders, I confirmed the idea. The Grems may look like lumps, Corson, and they have several strange habits, but they have a hard core of shrewdness inside them. They can put two and two together, and they can even add a third two. They saw that you had won over the Tlinks. Right after that, I told them that they weren't needed. They began to realize that with the election apparently in the bag, their job was ended. No more work for them, no more easy money. In that case, no more loyalty to you.

"Moreover, as you yourself realize, they don't like the Tlinks. That apparent shyness of their two-headed friends hides a lot of genuine snaky snobbishness. With their telepathic ability, the Tlinks are always putting on airs. So the Grems thought it probable that the member of their race who committed *larito* did it to revenge himself for an insult by one of those self-satisfied double-headed nitwits. And you yourself spread the rumor that *I* was in back of the insult."

"At this stage," observed Hlusan, "what was a Grem to think?"

"At this stage," said Kater, "the Grems were pretty badly confused. A few things they did get straight, though. First, that Corson was an extremely clever conniver—therefore, untrustworthy. Second, that once the election was won, Corson had no use for the poor fools who had helped him win it. Third, that Corson had solid Tlink support, and was encouraging the Tlinks to insult the Grems, who were supposed to be inferior creatures. They also assumed that I was in Corson's pay. They were all the readier to believe that because they had an idea that humans always stuck together. How were they to know that Corson was more rat than human?

"One more thing. By Corson's own account, I was an enemy of the Grems. Well, I don't like unpopularity any more than the next man, but when it comes to a good cause, I can take it. I went around among the Grems urging them to vote for Corson."

"You did what?" exclaimed that gentleman in dismay.

"Urged them to vote your slate. I think that did more to turn them against you than any other thing. Your henchmen added their useful rumors to the general confusion. Out of the whole mess, the Grems got one fact straight —that you were their enemy. They went to the polls the next day and voted solidly against you."

Corson began to curse. There was nothing suave and gentlemanly about

(Concluded on page 140)

The atom blast was trained on the rock

THE PILLOWS

By Margaret St. Clair

Were the strange, cuddly pillows of Eschaton innocent bits of thermal rock—or did they hold some anti-human power?

"THEY'RE lucky," Jon McTeague said with emphasis. "I told Thelma Mowry—she's secretary to one of the big shots in the company—they ought to bring that out more in the advertising, stress it, like, and she said nobody had ever written in about it. They just buy the pillows for novelties and, once in a while, to keep their hands warm.

"But anybody that works around the pillows knows that they're the luckiest things in the universe. Look at me. Be-

fore I got this job with Interplanetary Novelties, I'd just spent three months in the hospital with a fractured pelvis. Lolli and I were quarreling all the time, and I was sure she was planning to leave me. I just got out of the hospital when Lottie, that's our kid, came home from school with a stiff neck and a sore throat, and two days later the clinician said it was almost certain to be infantile paralysis, the third type. They've never found a cure for that. That really broke me up. I spent most of the first leg of the trip taking soma and trying not to think about things.

"Listen, when we hit Aphrodition, there was a 'gram from Lolli telling me not to worry, Lottie was better and it seemed to be type one after all. Lottie was all over it in a month, and she's never been sick, not even the sniffles, since. For that matter, none of us have. I don't even cut myself or get hangovers any more. And Lolli and I get along like —like a couple of Venusian quahogs."

"Then you think the pillows aren't fakes?" Neil Kent asked. They were two days out from Terra, on board the *Tryphe*. He leaned back in his bunk and drew deeply on the tube of cocohol-cured tobacco.

"Fakes? How do you mean, fakes? I know they're lucky—ask anyone on the ship—and I know they stay hot. Lottie's had the one I brought her from Eschaton, on that first voyage, sitting on the shelf in her bedroom ever since, and it's still as hot as it was when I dug it out."

KENT sighed. He rumpled his blond hair and frowned. Here it was again, the evidence, so utterly at variance with what he'd been able to get in the laboratory. Stick a thermometer near one of the pillows, and it registered 44 degrees Celsius at first, then showed a very gradual cooling until the pillow reached room temperature, where it remained. Yet everyone who'd ever handled a pillow or bought one at a novelty store knew they stayed hot.

"Maybe there's some kind of gimmick in it," he suggested, "something like those Mexican jumping beans my grandfather used to tell me about. Or maybe it's something the company rigged up, a little atomic motor, say."

McTeague snorted. "Any time you can make an atomic motor to sell for six bits," he said, "let me know. I'll buy 'em up, sell 'em on the open market for five dollars, and become a millionaire. I never heard of Mexican jumping beans before, so for all I know they're the same sort of thing. All I know is, you dig the pillows out of the rock on Eschaton, which the long-hairs say is probably the coldest spot in the known universe, and they're hot, nice and hot. You can dig up some in a few days, and see for yourself."

"How do you locate them?"

"Oh, we've got a dark-side hexapod," McTeague told him. "He hates hunting them. Sits down and shivers when he finds a colony. That's how we know where to dig."

"What do you use to dig with?"

"Atom blast, special design."

"Ever damage the pillows with it?" Kent asked.

"Naw, you have to train one right on them for about fifteen minutes to make a dent in them. They're not only hot, and lucky, they're tough."

Kent was thoughtful. "You know, that's really remarkable."

"Oh well, they're just novelties." McTeague spat into the incinerator, reached for the cards, and began to lay out an elaborate three-deck solitaire. Kent went on thinking.

It was that attitude, expressed by McTeague's casual, "Oh well, they're just novelties," that had made him decide to spend his vacation working for the Interplanetary Novelty Company. He'd taken four or five of the pillows (they were about the size of sand-dollars, black, and puffy) into the laboratory and thrown a bunch of experiments at them. His fellow workers had kidded him both ways from the abscissa, and Dr. Roberts had called him into the office and told him, gently, that he really wasn't employed to investigate—ah—children's toys, and that there was a group of very interesting experiments

he'd like him to try on the low radioactives. So now he was an A.B.S. on the S.S. *Tryphe*, bound for Eschaton.

"Anything else on Eschaton?" he asked.

"Nope. Not another blasted thing. We bring back some of that greenish rock, though—it works up into nice paper weights." McTeague moved a long column of cards to a pile headed by a purple ace, and went on playing.

Ten days later they landed on Eschaton—a routine landing, but interesting to Kent, who had done little space traveling. He watched with fascination through the bow visiplates while the navigator snaked the ship expertly through a long spiral down to Eschaton's surface.

"Getting an eyeful?" McTeague asked, joining him. "If you'd landed here as often as the rest of us have, you'd want to look the other way. Except for the pillows—and I consider myself honored to be on the same asteroid with them—I hate the place. A miserable little pebble, so blamed cold you'd be exaggerating grossly if you said it was frozen." He started to bite a chew of tobacco from the hunk in his hand, and then checked himself. "No spitting in pressure suits," he said morosely.

Overhead, the bull horn began: "Phweet! Phweet! Break out pressure suits. Break out pressure suits. A working party consisting of McTeague, Willets, Abrams, Kent will leave ship at 1630 to hunt pillows on Eschaton's surface. A working party consisting of . . . Atom blasts in number five locker. Atom blasts in number five locker."

AS Kent got stiffly into his pressure suit, he saw McTeague, already hardly human in the florid bulges of his own suit, inserting the protesting hexapod into a special job for hexapods. It must have been fifty inches long. Kent switched on his suit's radio.

"Look at the poor little tyke shiver," McTeague said. "He hates this hunting worse than pulling teeth." Then, to the hexapod, "Never mind, Toots. When we get back you can have a nice bowl of vitamush and berl steak."

They started out. McTeague, by right of seniority, was in the lead. He held the hexapod by a leash of psychroplex. Kent, walking beside Willets, felt a flash of pleasure at being out in the open again, though the visible curvature of Eschaton's surface made him move unsteadily.

"Watch out for low grav, Kent," McTeague's voice said in his ear. "All you men, set your object comps on the ship."

"Don't you have a map or chart?" Kent asked.

"Nope. The navigator keeps a record, of course, and sets us down on a different spot each time. He and the Old Man are doing it methodically. . . . Look at Toots! We must be getting near a colony."

The hexapod was pulling back on the lead and struggling. McTeague took a firmer grip on the leash and began to tug him along. Three or four hundred yards further, and the hexapod sat down and refused to move. Kent could see him shivering inside his pressure suit. McTeague snapped the creature's lead onto a chock on his suit.

"This is it," he said. "Kent, this is for you. The others have dug lots of pillows. Set your atom blast to three, and cut out a section of rock about two feet square. Use your blast to pry it up—I'll show you how—and then cut it crossways twice so it's in fours. By then you ought to be able to see the pillows—they're in cells, sort of, in the rock—if it is rock."

They began work. Kent found a weird fascination in seeing the rock curdle and flow in the unearthly glare of his atom blast.

"When you see the pillows," McTeague said over the suit radio, "take your blast and sort of flick down the edges of the cells, see, like this, and pick up the rock and shake them out. They come out easy."

He fitted action to his words. Kent, imitating him, began to make good progress. "Little things, aren't they?" commented McTeague. Out of his shoulder pack he drew a shapeless bundle, and pressed a button on its side. It began to expand.

"When you get enough pillows," McTeague ordered, "take the scoop hanging on the left side of your suit and shovel them into the sled. Those inflators are certainly a bright idea."

When the party had been working for three or four hours, he asked Kent, "How do you like it?"

The question took Kent somewhat by surprise. He straightened in his pressure suit. He hadn't, he found, been thinking about much of anything; he had been cutting out rock and extracting pillows from it in a mindless trance that was definitely tinged with pleasure.

"It's nice, somehow," he answered.

"I thought you'd like it. Everybody on the ship does, even the Old Man."

"Except Toots."

"Yeah, except Toots."

They finished with the colony of pillows; further investigation with the blasts showed only one or two isolated specimens.

"Might as well hunt another spot," McTeague said. "Look at Toots. See how he's pulling back toward the ship, and at the same time has a sort of list to the right? That means there's probably another colony off to the left. Let's go." He started off to the left, pulling the big, inflated sled, and tugging the reluctant Toots after him.

They had gone four or five kilometers when Toots suddenly reared back and began fighting the leash enthusiastically.

"What's got into him?" McTeague said. "He doesn't usually act like that even when it's a big colony. Abrams, you take his lead and the sled. I'll go ahead and see what's doing."

"I might have known it was a stiff," he said when he returned. "Toots hates dead bodies even worse than hunting pillows. Abrams, you hold onto Toots, and I want you two other men to come help cut a grave for whoever it is."

"I thought nobody except us ever visited Eschaton," Kent said as they walked along. "Did he ever have a ship?"

"Not around within seeing range. I suppose he could have come here on a life craft, after a wreck, or maybe he was marooned; it's been done. We'll get his identity badge and look through his sack before we bury him. Too bad we can't take him back to Terra, but it's too long for him to keep, and the Old Man hates dead bodies anyhow. Jonahs, he says."

THEY came upon the body. The man had died in a pressure suit, on his feet, with an atom blast of recent design on his hand. His face was intelligent and young.

"Looks like he was fixing to dig for pillows," McTeague said. "Maybe Venus Novelties sent him out. I hate to say it, but in that case he deserved what he got. Anybody that would work for a scab outfit like that—"

"What killed him, do you think?" Kent asked.

"Hard to say. His shoulder tanks had plenty of oxy. They say death is always due to heart failure in one way or another. . . . Get busy with that grave. I want it about two meters by one by one."

McTeague took the dead man about the waist and put him down on the surface of Eschaton. He opened the psychro-glass helmet and fumbled around the man's neck for the identity disk.

"Edward Clutts," he read with the aid of his suit light. "The serial's K20—4340. What's K20, anyhow?"

"Scientific worker," Kent replied.

"Um. Then I doubt Venus Novelties sent him. The disk was issued four years ago, so he hasn't been here less than two years or more than four. . . . Funny he's not decayed at all; the suit heater usually keeps running long enough for them to spoil some."

"That's only if the oxy runs out," Willets said. "He probably froze to death."

"Could be. Let's see what he's got in his sack." McTeague turned the body over and opened the container on the back of the suit.

"He's got a lot of stuff. Thermometers and things. What's this gadget?"

"Geiger counter," Kent replied. He had been watching with intense, almost strained, attention.

"Hum. Looks like he was trying to investigate Eschaton," McTeague said. "The poor chump, there's nothing here at all. Except the pillows, I mean. Have you got the grave ready yet?"

"Yeah, but there're a lot of pillows in the slab we just levered up," Willets replied. "You want we should just leave them, or can we break down the cell walls and shake them out?"

McTeague considered. "No reason why we shouldn't get as many out as we can," he said. "He'll never know the difference. We're bound to leave a good many in the rock anyhow."

Obediently, Kent and Willets began flicking their blasts back and forth over the cell walls and shaking the pillows out. When they had finished, McTeague put the body down gently in the hole they had left and the slab was replaced. Then McTeague called Abrams to come up with the hexapod and they all began digging pillows again. At the end of the shift, the sled was nearly full.

"Good day's work," McTeague said with approval. "Don't let me forget to tell the Old Man about the stiff and give him the identity disk and stuff. It's got to go in the log."

"Will there be an investigation?" Kent queried.

"Nothing to investigate. His heater stopped." McTeague sounded satisfied with his own explanation.

"I suppose." Kent was far from convinced and yet he had to admit that McTeague was probably right. Edward Clutts had died when his suit heater stopped running. "It— Could it have had anything to do with the pillows?" he asked.

McTEAGUE turned and stared at him. "With the *pillows?* Why, the pillows don't do anything at all, except keep hot."

"On Eschaton."

"Well, Eschaton's their home asteroid. If they're going to keep warm any place, it's got to be here."

They reached the ship, Toots leaping and frisking around them. Sometimes he got all six legs off the ground at once. The sled was taken up the gangplank and its burden of pillows emptied into Number One hold. Kent held one of them in his ungloved hand, and it was hot. Yet not eight hours ago he himself had dug it out of Eschaton's rock. The coldest spot in the known universe. . . .

After supper—Toots messed with the spacemen, and they all broke the Old Man's orders by slipping the hexapod bits of berl meat and gravysticks under the table—McTeague came up to where Kent was sitting and began to talk.

"Kent," he said, "I think finding that man's body upset you more than you realize. You don't want to let it get you down. A spaceman has to get used to things like that. That idea of yours about the pillows, for instance—that's the kind of crazy thing only a green hand would think of. The pillows! Why, they're just novelties, that's all."

Kent nodded and leaned back in his bunk, trying to appear relaxed. McTeague watched him. After a moment he looked relieved.

"Well—that's that. Want to play some Bizareque?"

Kent nodded, but while McTeague was shuffling and dealing the cards, he went on thinking. What was it about the pillows that bemused everyone, put a glamour on them? There was some excuse for scientists like Dr. Roberts; they had the whole range of the fascinating phenomena that the last twenty years had opened up for investigation to consider. Besides, most of them suffered from a form of scientific snobbery, a human desire not to make fools of themselves by investigating something that was only a novelty, a children's toy. But what about men like McTeague? Did no one, besides him, Kent, find anything odd in the continued heat of the pillows? Presumably, Edward Clutts had. Edward Clutts was dead.

McTeague's voice broke in on his thoughts. "Do you mean to lead a trump?" He pointed to the purple knight Kent had just laid down.

"Oh. . . . No. Thanks."

Before he went to bed that night, Kent put a thermometer by one of the

pillows he had dug up. It registered 44 C., as he had known it would.

By morning it had dropped a degree or two, and it went on dropping slowly for the next few days until it reached room temperature, 20 C., where it remained.

The holds were beginning to fill up. Toots had been dragged out on eight or ten pillow hunts. McTeague said there must be nearly a million and a half pillows on the ship and they'd be heading back to Terra pretty soon.

Still Kent was baffled by the pillows. Every time he dug pillows he felt the same blank euphoria which possessed the others, and it was only when he got back to the ship that he could even wonder about them. What had Edward Clutts been doing with his thermometers and his sack full of gadgets? Why had he died?

Kent might never have guessed if he had not happened to upset the glass.

He had been reaching into McTeague's bunk for a magazine the big man had discarded, and his left elbow had struck against the long lapboard McTeague used to lay out his solitaires when he was in his bunk. Kent hadn't seen the glass of soma and ginger ale which was sitting on the end of the board, until it started to fall over. He grabbed at it quickly—his reflexes were considerably faster than average—and set it upright again before more than a drop or two had spilled. As he moved, he felt a sharp sensation of cold against his wrist as if he had passed his arm very close to a large piece of dry ice.

He looked down, surprised. There was nothing in the bunk except the magazine, the glass of soma, the lapboard, and under its edge, one of the pillows.

Wondering, he picked it up. It was, as usual, agreeably warm to the touch. Where had the cold come from? The ice in the glass of soma had melted long ago.

Kent stood frowning at the edge of his bunk, feeling an impossible hypothesis beat at the threshold of consciousness. What could it be? Was it— What— The devil with it. But—

He slipped between the sheets of his bunk at lights out, expecting to turn and toss all night long, and was instantly asleep. He woke just at seven the next morning. He lit a smoke and lay on his back, one arm under his head, sorting out his ideas.

IN the first place, the pillows were sentient and intelligent. He would deal with that later.

In the second place, they had some sort of mental reach. That was why everyone on the ship enjoyed hunting them. Everyone, that is, except Toots. No one understood Toots' reaction, since the psychology of dark-side hexapods had not been much investigated. It did seem, however, that their mental abilities were parallel to those of dogs only up to a point, after which they went soaring off into some sort of high, supersensory cloudland. That was why nobody had ever taken them seriously, but it indicated to Kent that the pillows didn't want to be investigated.

It was probable, too, that the pillows had some sort of control over events; else why the streak of luck that McTeague (and everyone else on board the *Tryphe* had similar experience to relate) had enjoyed? The pillows wanted to be hunted and disseminated, and they had put a premium, in the form of pleasure and good fortune, on their dissemination.

In the third place— This was where Kent's mind jibbed. Really, it was no more fantastic than the assumption he had already made, without much mental discomfort, that they could influence the course of events. But this was something that every human being, that every sentient being, takes for granted every moment of his life. To endow the pillows with this ability was to fracture the supporting column of the universe.

So—in the third place, the pillows could reverse entropy. A pillow could extract heat, as a man sucks milk through a straw, from a substance colder than itself. They were intelligent, since they took care never to display their faculty where it could be observed.

In the laboratory, they cooled gradually from 44 degrees Celsius to room temperature. Otherwise, the difference between their fairly high temperature and the abnormal coolness of the objects around them might have been noticed even by the beglamoured (it was the only word) wits of the indifferent scientists. But if a pillow were not on its guard (he had caught the one on McTeague's bunk off guard last night when he had reached across it so suddenly), or if a pillow had nothing to fear, it would be possible to hold one of them in the hand, comfortably warm as usual, and feel the hand grow chill around it, feel the chill creep inward, have the hand freeze to the bone. That, on a larger scale, was what had happened to Edward Clutts.

Make a hypothesis. Clutts had been landed, at his own request, on Eschaton, to investigate the pillows on their home terrain. There had been a rendezvous appointed at some specific time. They had looked for him, of course, but a man is a small object, even on a pebble like Eschaton. Clutts hadn't gone to the rendezvous because he was dead. The pillows didn't like to be investigated.

What did the pillows do with the heat? Kent rolled over on his side and lit another smoke. Presumably they needed it in their metabolism. Maybe they used it to make more pillows; no one had ever seen a pillow under the regulation sand-dollar size, and their reproduction and origin was a mystery in which no one had ever taken the slightest interest.

What did the pillows want? It seemed to Kent there was only one answer possible. They were the inheritors, the successors to the human race. Maybe in the near future, maybe not for billions of years, they were going to run the show. It was probably a near threat rather than a remote one. The bribes they were paying to be disseminated *now* would indicate that they did not intend to wait until the universe began to run down. No wonder Toots hated them.

What was the Latin for pillow? Pul—pulvinus. They ought to be called *Pulvinus victor*. . . .

McTEAGUE'S alarm clock went off. He yawned, stretched, and sat up in his bunk. "Time to get up," he said to Kent. "Two days more, and we'll be heading back for Terra. With all the holds full of pillows. Nice hot, tough, lucky pillows."

"McTeague . . ." Kent said.

"Yes?"

It was hard to tell McTeague what he had discovered, even harder than he had thought it would be. McTeague listened without interrupting him, sitting on the edge of his bunk, rubbing his reddish eyebrows with his hands.

"We mustn't take them back," Kent finished almost desperately. "We've got to tell the captain and the crew, have them dump the pillows out. No pillows must ever leave Eschaton again."

It sounded horribly weak. McTeague looked at him for a moment and then got up, still rubbing his eyebrows. "I'll have to tell the Old Man about this," he said. . . .

They put Kent into the navigator's cabin—the navigator had to move in with the Old Man—and stationed a guard in front of the door. Kent sat on the edge of the bed, his hands between his knees, and stared down at the design of the eutex on deck. He could hear Toots howling somewhere; it sounded a couple of compartments off.

What was going to happen to him? When he got back to Terra, he supposed, there would be a commission in lunacy and then a lot of little white buildings and occupational therapy. And meantime the pillows . . .

The cabin was getting cold. He went over to the toggle in the wall to turn on more heat, and then paused, his hand on it, realizing what was happening.

He wasn't going back to Terra!

The pillows were intelligent, they were sentient, and they weren't going to let him go back alive. He'd be buried on Eschaton. The thermometer on the wall registered twenty, but he was shivering and growing colder by the second. His body heat was leaving him in great waves; it was being sucked from him as a pump draws air from a jar.

As the incredible coldness closed over him, he found time to wonder how the pillows could direct their force, what their method of operation was, and he felt a flash of triumph at the thought that this would show McTeague and the others. When they found him frozen to death in the warm cabin, surely they would wonder and remember what he had said. The pillows had overreached themselves.

JUST before he stopped thinking permanently, the fallacy came to him. The pillows knew what they were doing. They would let the heat flow back to him once he was dead; there would not be even an icicle to warn McTeague. It would be written down as heart failure in the log. . . .

"Stow that noise, Toots," McTeague said. They were at mess; he was holding a juicy hunk of berl meat before the hexapod's nose and waving it back and forth enticingly. "Be a good hexapod. Here." He made another pass with the meat at the hexapod.

"He's not interested," Willets said above the din of the creature's howls. "It upset him, that young fellow dying that way." He poured more cream on his frujuit.

"Yeah, it's too bad he had a bum pump and all that, but heck, he was nothing but a nut. Toots oughtn't to take on so over a guy like that." He studied the hexapod thoughtfully an instant and then spread a piece of bread thickly with bollo tongue paste.

Toots pushed the offering aside and howled again, a long, dismal howl, a very sad howl, that seemed to come from a long way off.

"I don't know what ails him, anyway," said McTeague. "The way he's going on, you'd think it was the end of the world."

THE STRANGEST BEDFELLOWS

(Concluded from page 132)

his cursing, but it pleased Kater, and he began to laugh. At that, Corson lost his head altogether. He plunged at his enemy, fists swinging.

Kater's own fist caught him in the stomach, and then Hlusan smacked him over the head with his snout. Corson fell on his face. Kater said:

"Be careful, my good man. Don't tangle with the President of Lethe, or his right hand assistant."

Corson picked himself up and went out without a word. From outside there came a sudden hissing gabble.

"The Tlinks," observed Kater. "They've just heard that he lost the election. But they expect him to keep his promises anyway. Does that man have troubles!"

"We shall save him from them," said Hlusan. "Corson's misfortune is that he has never indulged in honest labor. I shall order him arrested, and see whether or not I can cure him."

"With physical labor?"

"It is his greatest need."

"If you don't cure, you'll kill. But I suppose that even that is better than leaving him as he is. Meanwhile, I'd like you to find me a hideout for a few days."

"But you are on the winning side!"

"The Grems don't know it yet. They still think I'm Corson's man. And I'd hate to have one of them come around and explode on my doorstep."

"Politics," said Hlusan thoughtfully, "is indeed bewildering. It forces one to do peculiar things."

"Or as we say on Earth, it makes strange bedfellows."

"You are right," agreed Hlusan. "To think that I should ever join with such an absurdity as a human being!"

●

Read WINE OF THE DREAMERS, by JOHN D. MacDONALD, an Amazing Novel of the Future Featured in the May Issue of Our Companion Magazine STARTLING STORIES—Now on Sale, 25c at all Stands!

THE READER SPEAKS

(Continued from page 9)

when he is again seen in public he refuses to speak to any of his old cronies—although he is living in new-found luxury and has expensive ladies on tap. Finally confronted he listens to them, puzzled, and returns their money casually.

So Mario takes the money and tackles the *Chateau d'If* himself—to find himself in the midst of the most amazing adventure man can conceive. Furthermore he is not himself, but an old man, odious and rich. What he does about this incredible situation makes NEW BODIES FOR OLD one of the stories of this or any other year. It is our hunch that Jack Vance has taken a major step forward with this one.

We have not published a time-travel story of the Mark Twain-*Connecticut Yankee in King Arthur's Court* genre for a goodly number of issues to date—and Wallace West has come up with just such a fascinating historical-speculation job in THE WEARIEST RIVER, third in our August novelet parade.

It tells a story of American students and their professor who find themselves in the Eternal City at the moment when the next A-bomb falls upon it. They are young folk of varied natures, backgrounds and intelligences—but all agree to helping their mentor conduct his final and most brilliant experiment that sends them back through the ages to Rome as it was immediately following the assassination of Julius Caesar.

Unlike most stories of this type its key figures are not sent back through time in helter-skelter style.

The professor knows the score and has, within the limits of his experiment, supplied them with the articles which will prove most vital to their needs.

So, in a world long gone they fulfill their roles according to their natures and training, and the psychological results are amazing and utterly fascinating. With the world of tomorrow dependent upon their behavior and achievements in the distant past they have helped Mr. West to create a grand bit of stf.

Room permitting there will be a fourth novelet in the August issue and the short stories will be plentiful and well up to recent standards. As for non-fiction features, Willy Ley promises to be present with another of his inimitable articles and Ye Edde will be on hand voluminously as always—along with those of you who write him intelligent and intelligible letters. So be it!

LETTERS FROM OUR READERS

WELL, we're off again on the epistle trail. There seems to be a fair amount of provocative and controversial material, for which, hosannah. But let us let the letters speak for themselves.

PEACE BUT NO SWORDS
by Don J. Nardizzi

Dear Sir: As we quietly and with mixed feelings close the door on 1949 we cast one backward glance at the offerings of TWS and SS. With a critical and, perhaps, jaundiced eye we review the passing parade and find, with minor discrepancies, a year of good and pleasant entertainment. We can only pat our editor on his noble but otherwise balding head and say, "Well done, little man. Bless your little blue pencil."

Yes, up to the Feb. '50 issue it has been a swell year, full of pleasure, education and progress. I will not attempt to rate the stories in this issue except to say that Kuttner's humor in "The Voice of the Lobster" was much crisper than his Hogben drivel, which I refer to Limbo. Having a weakness for time stories I naturally licked my chops over the lead novelet. As per usual, however, some stories we thrill to and others we wonder at. Hence the name of the mag, no doubt. But all in all, good.

Having been an appreciative, but to now silent, reader of Marion Zarathustra Zimmer Bradley's myriad epistles, I feel I must take exception to her taking exception to my opinion of swordsmen in science fiction. Her arguments are fallacious in themselves in that she herself admits that in the late 1700's the sword was replaced by a more modern weapon, at that time, the pistol.

That is exactly my contention. The sword, practically a museum piece today, will be all but forgotten in the future, the scene of the majority of s.f. stories. Your own mention of the failure of the blade at Fontenoy was a classic example of tradition versus progress—altho at the time you published my letter you mildly chided me for not liking "a dash of romance in your science fiction."

Marion quotes history to the advantage of the sword but only at the time when firearms were in their infancy. I have no quarrel with the sword as such and admit that it is best adapted to fictional exploits but only in the exploits of the past. I am well aware of the personal skill required to wield a blade, as I belonged to a fencing club back in New York a few years ago and fancied myself quite adept with the epee, however deluded I might have been.

But in the future the sword will be as incongruous as David's sling would have been at Iwo Jima. Except, of course, where the author depicts a decadent future wherein man reverts to primitive methods. It would be interesting to learn what other readers think on this controversy.

There are too many so-called Stf magazines which feature heroes with invincible blades, which in my opinion is a mockery to the type of future men van Vogt, Heinlein and Simac write about. I hope you see the light, Marion, and by all means don't get sick again. We would once more miss your letters.

At this writing, about five miles from where I live Robert Heinlein is working in the General Service Studios, supervising the filming of his story, "Destination Moon." It is the first really serious movie about interplanetary flight to be made in this country (Richard R. Smith please take note).

All the movie sets are by Chesley Bonestell, the Stf cover artist. The picture is directed by Irving Pichel, ever the pioneer in the industry. This should be good news for Stf fans. And only by a strong box office support can we assure Hollywood that STF films will have a following and thus assure ourselves of more of the same in the future.

Please don't think I'm a publicity agent for the studios concerned. I'm speaking as one of you and would like to see many more like productions. I'd like to see s.f. recognized for what it is rather than as the comic-strip type of fiction most (unenlightened, of course) people regard it.

"Metropolis" and "The Shape of Things to Come" were the only serious movies of the kind I've seen. There was a good comedy back in '31 called "Just Imagine" and a number of strictly grade-C serials, not to mention a goodly number of pure fantasies. But this latest attempt will have all that a fan can desire. The picture is due for release in early 1950.

Well, Ed, so much for now. Congratulations on the past

year and best luck for the coming twelvemonth. Am looking forward to your new quarterly of old classics but keep a sharp eye toward future progress at the same time. Don't let down on the rate of improvement.—5107 Delaware Avenue, Los Angeles 41, California.

We have thought of another point in favor of your modern weapons versus the sword controversy—although scarcely an appetizing one. Virtually all modern assassinations, including those of Lincoln, Garfield, Czar Alexander II, McKinley, Archduke Franz Ferdinand and King Alexander of Jugoslavia have been accomplished by firearms or at any rate by explosives in the form of bombs.

Surely, if the blade were to survive as a weapon, it would have done so in the highly personal business of assassination, where its silence, ease of concealment and hard-to-trace anonymity would seem to put it in front of the noisy and conspicuous explosive weapon.

No, accept our apologies but we seem to be on your side in this one, Don. We apologize because we manage to remain so frequently wrong.

As for the Heinlein movie, we look forward to seeing it upon its release. Thanks for a good letter and we're wishing a successful 1950 to you, fellow.

SLIGHTLY TERRIFIC
by Ed Cox

Dear Editor: The lead novel in the February TWS was slightly terrific as far as my preferences go and I'd certainly like to see more like this. It had overtones of van Vogt, Clarke and many others but it was not patterned after any one author's story or style. It was quite good all by itself. Quite engrossing I'll even say. It sure starts the year off good for TWS!

Tramping steadily onward we come to the novelets. Brackett adds another fine story to her long line of hits. It has suddenly dawned on me that a nice fat 400-page book of Brackettales would be a darned good buy! Now if some enterprising publisher would only realize this. Needless to say she does a bang-up job every time she writes a story and the longer the better. I hope you have more by her soon.

The Jones story is weak in comparison to the two above-mentioned items but it does carry on the series-train reasonably. I fear, though, that this series is a bit cut-and-dried reading. I'd like to see some of Jones' older-style stories. But, at present, he does do a satisfactory job.

And for once Kuttner has done a remarkably fine novelet of unpretentious tone and aim. That is, it isn't ballyhooed like his Hogben stuff or his previous series. This was a thoroughly enjoyable yarn and I do hope we'll see more of Macduff. Let him drop that Hogben corn and do a good job on this idea!

Speaking of series, the Space Salvage series of Cartmill is snowballing along. It didn't make much of an impression at first but lately the stories are gaining ground. We are now familiar with the characters, the SS outfit and the background is filled in. So I'm expecting something extra special.

MacDonald's short wasn't as good as many a yarn he's done for you and was a bit disappointing in that respect.

Ettinger's short was a lot better than the first story that I remember him doing in TWS quite a while ago. Not bad atall.

Bradbury's short story was—well, shall we say, good? Yes, the same old not only familiar but palling Mars setting—but that has taken on its true aspects now. The situation is about the same. A few stranded. Earth destroyed. The few's reactions. But this one I liked (whereas the last few have worn one's taste for such).

This long series of Mars-stories (soon to appear in book form as a continuous series-novel thing) is a really good satire on Man and his emotions, foibles, reactions to situations, etc. Fans should re-read those Mars stories that they disliked with this in mind. Also and notably his terrific "The Cement Mixer."

No further comments or dilly-dallying around this time. I'm late. But the issue, as a whole, has started 1950 (that fabulous year-date of ages past) off quite well. Hope you keep par or above.—4 Spring Street, Lubec, Maine.

Glad you remember Bradbury's THE CEMENT MIXER. Personally we had a feeling it did not get the recognition it merited when it appeared in TWS of April, 1949.

You should be acquainted with the finale of the Space Salvage series by this time—it wound up in our last issue with the 30,000-word NO HIDING PLACE. And perhaps the Jones novelet in the same issue will have put a little bunzen into your burner where that author is concerned. We thought and still think it an excellent yarn.

Brackett seems to be producing more material this year too—for which, praise Allah!

TERLOCK HOLMES
by V. L. McCain

Dear Editor: In re the fuss about the Sherlock Holmes of science fiction I won't claim you've produced him but the most outstanding character of the last few years in STF certainly turned up in your February issue.

I am speaking of none other than Mr. Terence Lao-t'se Macduff. Even his name has an attractive roll to it. And Macduff himself is one of the most fascinating scamps we've run across in some time. We want more Macduff. Also, keep Captain Ramsey in the stories. He adds just the right touch as a disapproving but admiring sidekick for the hero.

I've never cared much for Kuttner except for the Hogben tales, figuring he was just a prolific hack. But while this one wasn't up to the Hogben tales as entertainment, no individual in that series is outstanding. The humor in this was above average anyway. The footnote on Ceres was the funniest thing published in STF this year.

The "Alien Machine" series which got off to a marvelous start gradually moved downhill while the "Space Salvage" series gradually improves. That's a cute angle you use to publish series like the abovementioned. Each installment is written as a complete story, complete with brief synopses of the preceding chapters included, thus technically staying inside your policy of no serials.

Mr. Editor, shiver in your wedgies. Your most carefully hidden secret is at last exposed. For years you have made faithful fans weep and moan every other month at sight of your covers. You have steadfastly ignored their pleas for something milder, more sedate and fitting to the covers of a science-fiction magazine. The only reply an importunate fan ever got was that the covers were designed to sell more magazines.

But now we know what you meant. For example, let's take a typical American family, the Smiths.

The Smiths are normal everyday Americans with one tragic exception. As a result of the dangerous habit of inbreeding (recessive traits, y'know) each and every one of the Smith family has a brain. What's more, they have the even worse curse of imagination. This is where their trouble starts.

Now for a typical day in the family life of the Smiths. Tom Smith starts off to work, joyfully whistling, little realizing that before this day is over he will have stooped to base deception of his nearest and dearest. After a morning of brain-destroying work snapping paper clips at the legs of the nearest secretary, he goes to lunch.

Stopping at a nearby newsstand to buy his copy of the "Daily Blat" he sees a pile of newly opened magazines not yet on the stand. After his eyes adjust to the brilliant hues he discerns the title "Thrilling Wonder Stories."

Making no attempt to disguise his purchase (the newsstand owner discovered his vice years ago) he plunks down his quarter, twists the shrieking offender into a tight roll, shoves it in his overcoat pocket and during lunch takes great pains to keep it there, hoping his luncheon partner will innocently assume that Tom reads such wholesome literature as "Gruesome Detective Tales." After lunch, Tom secretes the magazine in a bottom drawer in his desk, looking self-consciously innocent from there on.

On arriving home Tom slips in the back door, shoves his TWS into his tool chest to be perused when no one is around. Tom is an Stf fan from way back in his early teens but when courting Mary he found out that she was what is known as a "nice" girl. Since no nice girl would be caught

dead with a man who read anything with so lurid a cover, Tom quite naturally hid his reading proclivities until after marriage, when explanations would have been even more difficult.

Now let's take Mary. She didn't discover science fiction until around six months after she was married. Since Tom was clearly too respectable to have a wife depraved enough to read such obvious trash, Mary made a brave effort to give up the stuff entirely. But STF, like opium, once tasted, is habit-forming.

So when Mary goes out to buy groceries that afternoon she spies TWS in a neat pile in the supermarket newsstand. Carefully shielding the cover from the salesman's startled glance Mary drops a quarter on the counter and hurriedly moves away. Mary doesn't have to smuggle her copy home. It just goes into her shopping bag and she walks right in (nobody's home yet, you see).

After hiding her copy behind the toilet preparations in her dresser drawer she feels secure and knows she can steal time to read it tomorrow during the day when she is home alone.

Now let's take Johnny Smith. Johnny is the Smiths' 14-year-old son. That evening in the neighborhood drugstore with his best friend, Stinky Dopelle, he too spies TWS. Johnny is a newcomer to STF, having read his first copy less than six months before, but already he is hopelessly trapped. Johnny does not have the price of an issue on him but he knows someone who does.

After being diplomatically propositioned, Stinky, who is no science fiction fan but a pretty good businessman, says "Who, ME lend you MY two bits for THAT crazy stuff? You're nuts! I've got better uses for my money."

However Johnny is made of stern stuff and does not give up easily. After listening to Johnny's most persuasive oratory and a succinct summation of his most logical reasoning, Stinky begins to waver and says, "Owww, all right, aw right! Leggo, stop twisting my arm, you can have the two bits. But just till next week. I gotta have it back then."

"OK, OK," replies Johnny, "You'll get your old two bits back but just don't let me hear you tellin' my folks anything about this or I'll twist yore ole arm clear off. Ma'd skin me alive and Dad'd beat the tar out of me if they caught me with this Gosh, look at that picture. Some dame, huh?" Stinky cautiously agrees.

Johnny then carries his copy around in his notebook for the next two weeks, reading whenever his History or English teacher isn't looking.

Oh, yes, there's a fourth member of the Smith family, nine-year-old Hildegarde. But she's not old enough to read science fiction. Give her a few years and lurid enough covers and you'll be selling four copies of THRILLING WONDER Stories to the Smith family!

Yes, that's the sordid tale. Just a circulation scheme to oversupply the market by selling three copies where one would do. To think that human (are STF editors human?) beings could stoop so low. By the way, that sounds like a good racket. Anybody wanna lend me some dough so I can put out a STF mag with daring covers. We'll clean up (on the public, not the covers).

Sorry I can't claim credit for the above. Wish I could but it was actually Ed Zimmerman of Eugene, Oregon, who has been reading STF almost as long as I've been alive, who figured it out. I guess it takes time and experience to ferret out Ye Ed's nefarious schemes.

Marion Zimmer's letter gives me an idea too, Ed. Wonder if it's the same as yours. If I write it up I'll send it to you. But I'll probably be too lazy. Of course, I could always say you suppressed it as competition to your story. But, doggonnit, everybody already knows I can't write. —% Western Union, Tillamook, Oregon.

Wish our circulation department were up to the theory you and Ed Zimmerman have expressed so ably—if they were we'd be lolling on Florida sands now while our publisher lolled on the Riviera. A very amusing idea all the way.

As for the idea we said we got from the Marion Zimmer Bradley letter anent never underestimating the power of a sword—well, we seem to have mislaid it somewhere. And re-reading the aforementioned epistle fails to bring it back. Shucks!

You've been underrating Henry the Kutt. He's a whole lot more than a "prolific hack" under any and all of his pseudonyms. We too hope he'll do more Terence Lao T'se MacDuff stories, complete with Captain Ramsey. But precisely because Hank is not a hack he cannot and does not turn out "set" stories on demand.

We have an idea he'll be along with a sequel someday soon.

Write us again when you get another circulation idea, V. L. We really go for the one above!

WHAT'S CHIVALRY?
by Pearle Appleford

Dear Editor: You'll be pleased to know that the age of chivalry is not yet dead, at any rate not in science-fiction. I'm certainly in a position to know.

I hope that you get this letter safely, and hope even more that you will publish same if you can. First of all it is a letter of thanks to you for publishing my first letter. I wrote this a long time ago and had forgotten all about it, imagining that it had been consigned to its last resting-place in your waste-paper basket with the caustic remark "What a nerve the woman has," or stronger words to that effect.

Then, in the middle of December, the letters began to arrive and I realized to my amazement that I had really got into print in T.W.S. and that my frantic plea had not fallen upon deaf ears.

Secondly I should like to thank all those people who were kind enough to write to me. I have enough correspondents now to keep me busy all the time and I am going to try and keep it up for as long as the other parties stay interested.

The very first letter that arrived was very depressing, being from someone whose parcel of magazines had been refused acceptance at the post office, due to some new regulation further restricting the importation of mags (as if they weren't restricted enough already!).

I wrote to my local post office, and received the following lucid reply, ". . . books & periodicals imported for private use and not for re-sale may be imported without permit provided they do not fall under schedule 3 of Government notice 2386 of 3.3.1949." This got me exactly nowhere.

While I was still running around in circles trying to find out the meaning of schedule 3 etc., two magazines arrived. One of them was the T.W.S. containing my pathetic letter. Words cannot describe my emotions when I saw that beautiful cover with the green-eyed advertisement for tooth-paste being strangled by the gremlins in green sun-glasses. Nothing could have pleased me more.

Then a few days later some more magazines arrived—all T.W.S. and Startling for the past year and two others. Anyway the result is that I have stopped worrying as it is obvious that no one quite knows what is going on. So how can I understand the complicated and mysterious laws which are different and varied as B.E.M.S.? It is also obvious that my post office is going to deliver the mags. without a word of objection being said.

I certainly never expected a response like this, and if the flow of magazines is stopped in the future, I will at least have discovered the generosity of some of your readers, who have gone to a lot of trouble on my account.

Only dissenting note came from my mother, who remarked that she wouldn't like to read books with such awful covers. I agree about the covers and think that it is time that s.f. stopped hiding away behind its lurid trimmings.

Well, I won't go on about that, as the subject has been done to death in every letter printed in your magazines.

I hope this gets the next issue. Thanks once again, and tot siens.—75 Kensington Drive, Durban North, Durban, Natal, South Africa.

In connection with the same letter—two postcards from author-fan Joe Gibson, 84 Kensington Avenue, Jersey City 4, New Jersey, announcing that he had mailed Miss Appleford 15 issues of TWS & SS and that he had received word from her of their safe arrival. Perhaps it was the two Kensingtons that drew you together across such a multiplicity of oceans, Joe and Pearle—or was it?

At any rate, nice going for all concerned and this despite the slur at our Rembrandtesque, our Gainsboroughish, our Daliesque covers.

BEEF ON TWO B'S
by Lee Hickling

Dear Sir: I've been a voluminous reader of science-fiction for the last ten or a dozen years but I suppose, since I don't ordinarily write letters to editors, attend conventions, or mimeograph a magazine, I don't exactly class as a fan.

Whatever I am I have two things that have been seething within my breast for several years now, and they have got to come out in public if I'm going to sleep nights.

In a nutshell they are Bradbury and Bergey.

Let me expand upon the second of them first. I have read every copy of TWS and SS that I have been able to find on the stands in whatever part of the planet I happened to be for more years than I care to count. In very nearly every issue, one or more readers have begged you to get rid of Bergey.

The derisive comments that I have read about his covers would, if put end to end, waste a heck of a lot of time placing them end to end. Surely it must have occurred to you or your predecessors that Bergey was rather unpopular? That his covers might possibly be a little (oh, ever so little) too lurid for the type of magazine you publish? Perhaps even that he was not quite the right caliber artist for this sort of thing?

If such doubts ever enter your mind, apparently they are quickly forgotten.

I know very well that all this has been said before. But why is it never taken seriously?

Oh, well. Next item on the agenda.

I have never liked Ray Bradbury. His last few stories have finally crystallized in my mind the reasons why. This, I suppose, approaches sacrilege, but here it is—

Ray has always seemed to me to possess an extremely repellent type of naive bitterness that is nothing more than adolescent. I'm completely unable to account for the worship he receives from the average reader.

It is true enough that he possesses a high facility for the pseudo-poetic type of phrase but how this alone has been able to disguise for so long the essential "Human-beings-are-such-horrible-filthy-excrescences-but-ain't-I-cute" character of his outlook is beyond me. Such a shabby, shallow, sophomoric and perverted attitude does not seem to me to be worth perpetuation, much less adoration.

Those may seem like hard words but I feel very strongly about it. To judge by the reactions to Bradbury in The Reader Speaks, what you are supposed to do when you read an RB story is subside into ecstatic quivers, sighing, "How beautiful! How true!" Whether it is beautiful or not has nothing to do with the point I am trying to make. Parenthetically I would not be afraid to admit that it often is. But it is not in any way true.

This will, I guess, be jumped upon as heresy. Unlike Galileo, however, I shall not recant.

If this letter seems bitter you must remember that, as I said in the beginning, it is the product of ten or twelve years of fermentation. Actually I don't sour milk by looking at it and I hardly ever beat my wife.—405 State St., Albany, N. Y.

As to Bergey, Mr. Hickling, we're sorry you don't like his covers. Which is all we can say on the subject. Except that though there are a number of very articulate dissenters, there are thousands of people throughout the country who *do* like Bergey covers.

As for Bradbury—yes, he does have the weaknesses you mention. But you must have a blind spot where his strength is concerned. And he is recognized as having a very rare talent in circles far removed from stf. Within the last couple of months we have heard raves about his work from such varied and eminent folk as the fiction editor of "Mademoiselle," the former fiction editor of "Colliers" and the editor of one of the two leading annual "Best" Short Story anthologies.

You show us a writer without weaknesses and we'll show you one who is never read. That goes for Shakespeare, Dante, Dostoievski and—yes—even George Bernard Shaw.

WHY, UNCLE REMUS!
by Sgt. Fred J. Remus, Jr.

Dear Editor: Fandom, pfui, especially the type of fans that sit around and dream when they could be doing something to accomplish something definite. I read a letter in a letterzine quite recently that had a really excellent idea and I'd like to bring it to the attention of the lazy and probably penurious bunch that inhabit the pages of your collection of excellent stories and putrid letters.

The idea was to get something started to accomplish the first rocket flight beyond the confines of the earth. I have been waiting for some time now for someone to start an organization that would do something about space flight instead of sitting around on their fat posteriors dreaming about it.

I was thinking about the American Rocket Society for awhile, but I have seen nothing done about a nationwide publicity campaign that should have been going full blast long before now. Suppose, just for a start, the mythical organization, Spacemen, Inc. inserted an advertisement in all the leading magazines, asking for help in building the first spaceship.

That and the resulting interviews would set off the reaction that might jar loose the misers from some of their ill gotten gains. To put it bluntly, I am ready to start the thing off with $25.00 anytime any organization can show that it intends to do something besides use the gas from their mouths instead of the gas from the jets of a rocket.

The challenge is there. Will anyone have enough guts to take it up? I doubt it. In the first place, there are many too many writers to the editor who want to do nothing but sit around and try to start feuds.

That was an offer, now comes a threat. If you have one more issue of as high a quality as this one, so help me I'll subscribe. First was the Dancing Girl of Ganymede with its excellent atmosphere and characterization—second the Greater Conflict, only because of its length—and tied for third, Spectator Sport and Payment in Full, both very good. The rest aren't even worth informing you as to the myriad number of things wrong with them. One comment, though, what the heck happened to Kuttner this time? Surely the man can do better than that.

As for the review of The Conquest of Space, I couldn't agree more. Willy Ley and Chesley Bonestell together is something that I had thought would only happen in dreams. I am thinking seriously of purchasing a second copy just to remove the pictures to frame.

As I might have said before, I'm quite interested in rocketry and if there is any organization that is in active work today why haven't we heard about it. Money seems to be the main problem and with enough people ready to turn it loose for the cause I don't see why they haven't come after it.

Despite my snide comments at the start I think that fandom could, if it wanted to, be the instigating factor in the start of the Conquest of Space. Certainly, given an agency in which we could have confidence, we could get quite a little bit of money together and see that it was used, instead of abused. Good Ghu all gooey, I have been living down the comment "Buck Rogers stuff" too long already, I want to do something about it.

The challenge of the call to space
Is here today, it grows apace,
And flows and spreads and filters wide,
But men today with iron hide
Have said that they are not concerned;
A penny saved, a penny earned.

They hear the pleading for escape,
But sit with foolish mouths agape,
And laugh at those who dream and work
At tasks which they would rather shirk.
But I have got the wanderlust,
And this my cry: The moon or bust!

If not for me, some other man,
Can all the lunar wasteland scan,
But God Above! I want to try,
To see it happen ere I die,
And death might come at any time,
To you or I, and so this rhyme.

The stagnant mind and soul of lead,
However, might as well be dead,
They dream of naught, and nothing give,
They know not yet the way to live,
Do you, and can you, dare you, dream?
The Rockets! Hear their whispered scream!

Their whispered, thundered, shouted roar,
Disrupting some unknown shore
Is yet a fiction, not a fact,
As far as we are in the act,
The rocket might as well be gold
For cost. My Tale is told.

I leave you with this parting thought,
Think of the things your money's bought,
And wonder just a little while
About the cost of fuel per mile,
'Twixt here and Luna. I just hope
You'll help this plan increase its scope.

That, my dear editor, is a challenge to you, as well as to every other living person with enough vision to see that it could be done now. Will you help? Will all of you?. —Sgt. Fred J. Remus, Ja. 19278700, % Branch Post Office, Chanute Field, Illinois.

We felt somewhat the same way when we completed our fifth perusal of the Ley-Bonestell beauty, Fred. But while you certainly seem earnest in your wish to get man started toward space, have you any idea of the costs and amount of red tape involved in even the puniest effort on the scale you suggest?

Inserting advertisements in all the leading magazines, for instance—well, if you wants ads large enough to catch the eye of most readers, you'll be out a couple of hundred thousand dollars before you can turn around twice.

Certainly there are active rocket societies —notably in this country, the Pacific Rocket Society, whose Vice President E. G. Ewing can be reached at 11,008 Fruitland Drive, North Hollywood, California. And of course there is the British Interplanetary Society, whose journal editor can be reached at 157 Friary Road, London SE 15, England.

But these are small if able groups since spaceflight, by its immense costs and war potentials, is largely a government project here and abroad. If you wish to take an active part in its development you'd better seek a trasfer to a White Sands unit, Sergeant Remus.

And now, in response to your doggerel—

All those who would the glove of space
Pick up to hurl back in its face
Must bow before the whirling sticks
Of those concerned with politics,
With fear of Soviet Moscow or a
Pinkish menace called Andorra.

Above, the planet's steady light
Beckons through each passing night;
It may be close it may be far
It may be checked by H-bomb war
But those who seek the skies' escape
Shall someday sever man's red tape.

They say who first in off-Earth flight
Attains our globe's lone satellite
Shall hold us all in deadly thrall
Of bombs adropping in free fall.
A miserable aim, we reckon,
For those to whom the planets beckon.

We *know* in our aging bones that somehow, somewhere, someday man is going to make it. We only hope it comes to pass during the next decade or so. As we have already stated, Columbus and his men will look very pikerish indeed to those who return from the first true space-flight. Best of luck, Sergeant.

BACKWARD, OH BACKWARD . . . by Sophie Gill

Dear Sir: I read your magazine regularly and like it a lot. But I used to like it even better before the war. The stories were more original and had less sexy illustrations. So please bring them back, all those wonderful stories, minus, of course, the sexy pictures, wars, nut doctors, drunks, bums, kill-crazy soldiers and scantily-clad beautiful women running around loose.—P. O. Box No. 363, Islington, Massachusetts.

What you should look for, Sophie, is either of our new reprint publications—FANTASTIC STORY QUARTERLY and WONDER STORY ANNUAL. They will bring your "good old" days right back to you—and you should find them at your newsstand.

RECENT CLASSICS by Cordell Mahaney

Dear Editor: You say you're gonna publish an Annual? You say you're gonna give us all of those recent classics in a giant-size collection? Tell you what I'm gonna do! On my trusty Underwood I'm gonna go back and point out some fine items that it would be sheer folly to overlook when you start making selections. Focus your optics on this.

September, 1948 (Startling Stories):
"What Mad Universe"—Fredric Brown.
October, 1948 (Wonder Stories):
"Yesterday's Doors"—Arthur Burks.
"Miracle Town"—William Temple.
"Galactic Heritage"—F. B. Long.
"I Like You, Too . . ."—Joe Gibson.
"The Square Pegs"—Ray Bradbury.
"Referent"—Brett Sterling.
November (SS):
"Humpty Dumpty Had a Great Fall"—Long.
"Ring Around the Redhead"—John D. MacDonald.
"The Visitor"—Bradbury.
December (TWS):
"240,000 Miles Straight Up"—L. Ron Hubbard.
"Fruits of the Agathon"—Charles L. Harness.
"The Off Season"—Bradbury.
"Fuzzy Head"— Long.
January, 1949 (SS):
"Forbidden Voyage"—Rene LaFayette.
February (TWS):
"The Weapon Shops of Isher"—van Vogt.
"The Weakness of Rvog"—Blish and Knight.
"The Man"—Bradbury.
March (SS):
"The Loot of Time"—Clifford Simak.
"The Magnificent Failure"—LaFayette.
"Marionettes, Inc."—Bradbury.
April (TWS):
"The Concrete Mixer"—Bradbury.
"All Good Bems"—Fredric Brown.
May (SS):
"Flight Into Yesterday"—Charles Harness (you should print this one for its ending if for nothing else).
"Conquest of Life"—Eando Binder.
"Forgotten Envoy"—Sam Merwin, Jr.
"The Incredible Destination"—LaFayette.
June (TWS):
"White Catastrophe"—Burks.
"Mouse"—Fredric Brown.
"See You Later"—Kuttner.
"The Life-Work of Professor Muntz"—Leinster.
July (SS):
"Hollywood on the Moon"—Kuttner.
"The Unwilling Hero"—LaFayette.
"The Lonely Ones"—Bradbury.
August (TWS):
"Amphiskios"—MacDonald.
"Salvage"—Cleve Cartmill.
"A Date to Remember"—Temple.

"The Naming of Names"—Bradbury.
September (SS):
"The Portal in the Picture"—Kuttner.
"Communications"—Edwin James.
"A Condition of Beauty"—MacDonald.
"Beyond the Black Nebula"—LaFayette.
October (TWS):
"High Jack and Dame"—Cartmill.
"Cold War"—Kuttner.
"Kaleidoscope"—Bradbury.
November (SS):
"The Other World"—Leinster (outstanding).
"The Emperor of the Universe"—LaFayette.
December (TWS):
"Let the Finder Beware"—James Blish (splendid).
"The Lonely Planet"—Leinster.
"Skin Dupe"—William Morrison.
"Thicker Than Water"—Cartmill.
"The Colorful Character"—L. Sprague de Camp.

I have omitted such stories as de Camp's "The Hibited Man," Leinster's "The Lost Race," and Fredric Brown's "Knock," because they are already in book form. Also I have left out, because they strike me as below average, the following stories: "Against the Fall of Night," "The Moon That Vanished," "The Black Galaxy," "The Lake of Gone Forever," "Fury from Lilliput," "The Ultimate Planet," "The Sea-Kings of Mars," and "Lure of Polaris." The 1950 stories I won't go into, inasmuch as you'll probably publish an Annual for them later in the year. If you have to publish two issues, then don't feel bad; they're all fine stories.

Incidentally, your judgment regarding the magazines' format has been pretty fair during the last two years, but isn't there something you can do about those advertisements which you keep cluttering up the story section with? (What a sentence!) Why not put them all in the first and last few pages of the book?—1252 Magazine Street, Vallejo, California.

As for the annual—thanks for your suggestions. Many of the stories you mention have been planned for later issues, but we don't expect to get around to them for some time yet. Incidentally Fred Brown's WHAT MAD UNIVERSE was published late last year in book form by Dutton.

As for the ads—they are purchased for our entire string of Thrilling Publications, including love, western love, western, detective and sports, and they are scheduled to appear on certain pages of all editions.

SOMETIMES PUZZLED
by Gwen Cunningham

Dear Editor: I like to comment on the stories so you'll know what this segment of John Q. Public thinks. I also like to read the opinions of other readers and when their letters in TRS agree with me I'm pleased—but when they don't I like to puzzle over why.

In the February issue of TWS are several good works. WHEN TIME WENT MAD by Wylie and Kummer was certainly no gem. Its only real ingredient was adventure, which alone is hardly satisfying. VOICE OF THE LOBSTER by Kuttner gives us MacDuff, who, as a character, is so well integrated that it would be a shame to lose him. There's just enough larceny in him to make him as human as Mark Twain's kidnappers and that he is only a Venusian penguin after all merely adds to the delicious humor of the work. Please give us more MacDuff—and long may he wave!

DEAD RUN by Cartmill. The Murchison series is highly readable but does not compare in humor to the MacDuff classic. For a man who gets so far and does so much (in such a hurry too!) Murchison is paradoxically unable to make enough of a pass at Helen to match his other abilities. Also, his impossible obstacles or missions are almost too cosmic, you know, and he works them out with implements the author has considerately provided him with every time. He's too good—too perfect—and personally I'd like to kick him—but hard!

SPECTATOR SPORT by MacDonald was good enough but Dr. Maddon was hustled offstage too swiftly for decent characterization and seemed therefore too much of a pawn. I got so I didn't care what happened to him. Furthermore I detest the sheer idea that the human race could so deliberately and willingly enslave itself to such disgusting habits.

THE SKEPTIC by Ettinger wasn't funny enough to be amusing nor good enough to be interesting. Too bad it was ever written.

PAYMENT IN FULL—ah, Bradbury! How he captured the helpless rage of the trapped man, the sense of a loss too cosmic to be put into words, the hopeless grief that could only end because the end had come! This, my friends, is a little masterpiece. The depth of emotion hidden behind ordinary chit-chat is shown here in exquisite beauty. The very essence of mankind and his need for survival—it is all there within the story in beautiful and soul-stirring understatement. It deserves a rave and this is it!

All this about rough edges is foolish. If I want them I can trim them myself. After all, what have edges to do with stories or pictures?

As for Finlay, he has always been wonderful and still is. However, he's not the old Finlay. He has abandoned the etherial beauty that gave him fame and now renders "action shots." As for Asterita, if you'll pardon the expression, what a ham!—8519 MacArthur Boulevard, Oakland 5, California.

Okay, Gwen, write us again—soon, that's when.

SWAP CHAP
by A. M. Neil

Dear Sir: It will be appreciated if you will print my appeal.

I have enjoyed science fiction for a number of years and, like most fans, treasure back numbers. Unfortunately carelessness—moving, leaving magazines in hotels and trains, lending them to friends—has produced a number of gaps in their ranks.

I will be pleased to hear from anyone interested in selling or swapping back numbers of almost any science fiction magazines.—P.O. Box No. 223, Postal Station A, Toronto, Ontario.

We wish you the best of luck, Mr Neil, and the fullest of stf bookshelves.

MORE OF THE ANTI-SWORD
by J. P. Conlon

Dear Editor: I see a remark anent that classic weapon, the sword, by one Marion Zimmer Bradley, whose historical background ain't what it should be. There were weapons before the sword—such as the Tipperary Rifle, also known as the shillelagh, and the long bow, which is so charmingly if figuratively drawn by la Zimmer-Bradley.

The personal skill needed to manage a pistol is considerable. I speak as one who has spent a fair amount of time behind a .45 automatic pistol in hopes of making Marksman, Sharpshooter or (drool) Expert. The pistol is the hardest of all firearms to shoot well.

To this rule there is but one exception—to wit women. For many moons policemen have marveled at this. A dame wants to dust off hubby. So she comes in with a Spanish .25, an ancient H & R revolver or some other $3.00 job from a hock shop. Closing both eyes she points the weapon at her prey. When the fog lifts, there lies the poor omadhaun with a slug through the ticker. Then when the ballistics boys try to hit a wastebasket with it, it takes them all night to do it.

Today the sword is a symbol only. The last to carry them in battle were the Nips. The Samurai sword at its best was often better than the famous old Damascus blade. Many of those carried in the war were heirlooms hundreds of years old. So what did they accomplish? They were good for whacking heads off prisoners, and little else.

Many times they were carried in Banzai charges and a hunk of junk made the month before laid the owner with his ancestors. There are even cases where Jap officers spent the last few seconds of their lives trying to cut their way into Sherman tanks. T. S., old boy.

The sword is a symbol. It looks nice but I'd rather have a good old rifle—or even a pistol. Toad stickers have no place in stf. Our hero would play hell getting around with three feet of iron hanging from the belt of his space suit. Spaceships are apt to be cramped, no?—52 Columbia Street, Newark, Ohio.

Personally we'll settle for one of those Winchester carbines many of the boys were using toward the end of the war—or maybe a burp gun. But you have brought up the mystery of ages in your shut-eye-marksmanship - by - irate - women statement. We have oft pondered it ourselves—from a safe distance. Or is there such a thing? Nice letter, Herr Conlon. We hope such blade-addicts as Heinlein, Harness and Brackett, along with la Zimmer, Bradley, will take due note.

ONE GAL'S OPINION
by Mrs. Carol Rae McKinney

Dear Editor: This is my first letter to your magazine (sounds familiar, doesn't it?). Anyway I think all the stories are wonderful in the February issue, which yours truly has just finished devouring. I list my preferences in order—

THE DANCING GIRL OF GANYMEDE—Very good. Leigh Brackett is one of my favorites. A story with a moral which everyone should consider.

WHEN TIME WENT MAD—Also very good. An interest-holding plot. The ending—well, it was okay too, I guess.

THE VOICE OF THE LOBSTER—The same as the above only a little less so. In some places it had a lot of amusing lift though.

THE GREATER CONFLICT—Another good Cal Meacham story but not up to the first two. Let's have more!

DEAD RUN—When is that poor Jake going to marry Helen? Or is that a secret for some future issue? Anyway it was the best short story.

SPECTATOR SPORT—Okay but I would not go out of my way to read it. Is that what you call "built-in" television? I'll have mine plain, thank you.

PAYMENT IN FULL—How disgustingly true. That's probably just what any three men would do in their case. Makes you feel ashamed somehow, doesn't it? Oh, well—

THE SKEPTIC—How corny can you get? This one is strictly unmentionable. I know—it's probably "all in my head."

Well, if this does get published (and I have my doubts) would some other young married girl drop me a line (I'm twenty-one)? I'd like some stf pen pals.—3500 Sheldon Street, Del Paso Heights, Cal.

We only hope they don't turn out to be poison pen pals, Carol Rae. Did you say "all" the stories in that issue were wonderful? As to how corny can we get—oh, just stick around. The answer is plenty!

CANADIAN CAPER
by Bill Morse

Sir: PAYMENT IN FULL—Ray Bradbury has the George Orwell ability to select one thesis and carry it to its awful logical conclusion. This and KALEIDOSCOPE stand out as the two best shorts in my long though intermittent experience of stf.

DANCING GIRL OF GANYMEDE—Leigh Brackett, like Bradbury, can develop a popular concept of the future—the android—to its ultimate conclusion—humenity being what it is.

THE GREATER CONFLICT—Raymond F. Jones. Not quite up to the standard of the first two and once I recognized the characters I knew what was coming. The rest of the issue was on a slightly lower level except for TRS, which has a place of its own.

When, oh when, will Henry Kuttner supply us with another tale as enthralling as THE DARK WORLD? His Hogbens are funny enough but he is better at full-length stories. And why, oh why, in the majority of tales does the hero end up with the girl in his arms, leaving us to assume they will marry and bicker ever after? Even Kuttner knows it is wrong and admitted as much at the end of THE DARK WORLD—remember?

Richard R. Smith in TRS has a very interesting idea if developed far enough. The only trouble is that people are scared to accept it. Presumably they fear they might discover themselves to be the figments of a madman's brain.—W. E. E. (RAF Signals) RCAF, Edmonton, Alberta, Canada.

We failed to find Fra Smith's concept frightening. On the contrary. it seemed like rather good fun. As for your rebellion against the clinch-finale, you cad, sir. Write us another when you're in the mood, won't you?

DANCING "DADDY"
by Theo Ashlock

Dear Son: I use the above salutation because I soon shall have completed a half century of reading science fiction. And, son—man and boy during that time I have read science fiction as is science fiction.

Not since reading Scott's "Ivanhoe" have I encountered a piece of literature containing every one of the qualities which makes a story truly great until I read Leigh Brackett's DANCING GIRL OF GANYMEDE in your February issue. Here again is a story with everything in it—comedy, drama, mystery, pathos, love, faith, hope, charity, warning, admonition, moral instruction and—plain old out-and-out entertainment! ! !

I have never met la Brackett and no doubt would be greatly disillusioned were I to. She probably is one of those thundering females who can crush a mere man to a pulp simply by lowering an eyebrow at him.

But as a writer—a writer, that is, son—Leigh Brackett is tops in my book. From now on I shall read every story that is written by Leigh Brackett. I shall buy at least one copy of every magazine you publish with a Leigh Brackett story in it.

Have been a newsstand reader of TWS and SS since the first copies appeared on the market. You have about five authors who really turn out masterpieces and Leigh Brackett tops the field.—P.O. Box No. 126, Liberal, Kansas.

Nice going, Pappy—and we wish we could get a peep at your birth certificate. Furthermore, none of that hogwash about the records building burning down. Incidentally, Leigh is one of the more attractive women writers currently extant. She is blonde, very good looking and extremely good company. If you don't believe us ask Edmond Hamilton. He married her.

WHEN DeWEESE WENT MAD
by Eugene DeWeese

Dear Editor: Well, I've finally finished the Feb. TWS, so here goes.

When Time Went Mad. Time isn't the only thing. Somehow I've always liked time travel stories but I can't seem to fathom them. Like Shadow Men in SS. Couldn't get anything out of that but I liked it anyway. I liked those short glimpses of the far future and past but I was a little disappointed to find that the main part of the story was only a couple of hundred years in the future.

Dead Run. Phooey! That was terrible. In fact I only read the first page and a half. And Cartmill has done such good work, too, like Deadline. And the pic, another emphatic phooey! I can't stand Astarita!

Dancing Girl of Ganymede. Good, but at first I thought it was going to be a direct copy of Shambleau. One heck of a disappointing ending on it, though. Those little anthropoids (that's what they were, weren't they?) in the pic looked like small editions of the one in What Mad Universe and Hollywood on the Moon.

Spectator Sport. It was short, so I read it. And the time travel angle kept me going. Poor guy, a big muscular cowboy the rest of his life.

The Skeptic. Didn't read that one all the way through either.

The Greater Conflict. Wonderful, even if I did have to go back and read the first two in the series first. I'd say that was the best story of the ish. Mayhap you could talk Mr. Jones into doing something else on it. I'd like to find out who wins and how and when. He could possibly make it into a novel.

Voice of the Lobster. I liked that about MacDuff having sold them the Earth. But I thought that MacDuff was the "unhappy vegetable" in the pic, that is, until about the second chapter or so when he mentioned Sol.

Payment in Full. Gad, but that Bradbury must hate people! But I liked it. About number two in the ish.

Now for the cover. I presume that was the little scene where Mag was being captured by the Trogs. I didn't think they were quite that small, though.

That new mag of older stories won't be more than twenty-five cents, will it? Oh, well, I'll get it anyway.—Rochester, Indiana.

Two bits she is—as if you didn't know already, Gene. As for your "anthropoids"—well, they were supposed to be the same species as Tok, the "furry . . . aboriginal . . . lemur-eyed child of the forests." As such we thought he looked quite life-like.

EPICENITY
by Manly Banister

Editor, TWS: When a story is good I don't eulogize. Stf should be good. When a story is bad I don't criticize. You can't expect to please everybody. But I can see absolutely no

excuse for publication of Bradbury's disgusting bit of epicene melodrama in February TWS.—1905 Spruce Avenue, Kansas City 1, Missouri.

Check some of the other opinions of said story, Manly. We were about to mention that we are one quarter Banister on our father's side (never mind which quarter) but shall forego the item in view of that nasty word you use. Seriously, let's not get too s., s., and g. about stf.

EMPIRICAL IDEAS
by John W. Jakes

Dear Ed.: Herewith are a few ideas I want to present to the whole empire (and it is nearly that) of science-fiction fans. I'm not going to comment about any of your issues in particular because I think that there is something much more important for fans to discuss. And your letter column, I hope, will be the medium.

Friends and assorted bem-lovers, it seems to me that the time has come to take stock of this rising thing we know as science-fiction. Our beloved form of literary endeavor has a rising army of rabid enthusiasts but the majority of people still regard s-f as "trash." This argues that something must needs be done.

First I'd like to define terms. To me, there are two distinct types of story in our particular field of attention. One I'd like to call "Science-fiction," the other, "Futuristic fiction." The names themselves mean little. It is what they stand for that is important.

"Science-fiction," to me, is fiction about science. Perhaps you are about ready to go on to the next epistle, confirmed in your opinion that I am an idiot. Ah, but hear me out. Science-fiction is that general type of story which deals with problems arising out of science, and not out of the character of human beings. Its essential conflict is Man vs. Machine or Man plus Machine vs. Nature.

These stories involve complicated pseudo-logical theories, obscure calculations and other assorted data which: 1, make little sense to most readers, or, 2, convince the technically informed reading the story that, "Wow! This boy sure is a whiz at new scientific theories. His facts are one-hundred percent accurate." My friends, I do not think that this type of story will ever put science-fiction (in small letters, I refer to the general type as a whole) on the literary map. I think the second type will do the job.

"Futuristic Fiction," is fiction evolving out of future environments but not necessarily involving weird theories on how we can get-the-hell to Alpha Centauri in jigtime. This type of story is one of character; the character of men. It does not center on machines, or the solving of technical problems. Two notable examples who write this type of story are Ray Bradbury (whom some love madly) and Leigh Brackett (whom others hate to the point of insanity). And yet, to me they are the greater of the two types of writers.

So you like lots of gooey hunks of big fat science do you? Well, I venture to say that if you're a detective story fan you do not like big fat gobs of how the private eye's automatic works; if you're a western story fan I doubt if you would enjoy five thousand words concerning themselves with how the sagebrush looks at sundown.

If you like these two above kinds of stories, then brother, you like human problems set in a specialized environment. But in these stories, or in the best of them, environment is not the predominating thing. I hope by now what I am driving at is clear. I am beating the drum for "Futuristic Fiction."

Now, let us move on to another point. You hate space operas, do you, kid? Well, I'd like to tell you off!

You are annoyed when you read in s-f stories of imperialistic star-kings starting imperialistic wars. "Tritel" you gurgle. "Hack!" you mumble. Well, kiddies, take a gander at history. There's Mr. Napoleon and Mr. Hitler and a lot of other little crumbs who started senseless wars.

I doubt if the people slaughtered by the Little Colonel, or by Adolf thought the killing was very "trite," or "well-worn." (Certainly we hope that mankind will reach a stage where such wars are things of the past, but to howl about cosmic villains who wish to take over the solar system is utter stupidity. Unless of course you do not believe that we learn anything from history. If you ignore history, then I guess you can cry, "Hack!" till your lungs burst.)

Next, the matter of heroes. "Heroes," you sneer, "are the bunk. To have a hero save the Solar System 'just in time' is old stuff." Well, it may be, son, but just the same I'm damned glad that old Paul Revere didn't think it was old stuff when he routed the Revolutionary daddies from their slumber "just in time" to stop the Redcoats. If Paul wasn't just a "cheap ol' hack" then we might not be around right now, and you might not be griping.

To deny adventure to the future is to deny the American past of such magnificent legends as Billy the Kid, Buffalo Bill, Sitting Bull and Davy Crockett. To say that there won't be places like Dodge City, Abilene, Santa Fe and the Comstock Lode in the world of tomorrow, is to deprive that world of all the things that will make it big and lusty and beautiful to behold.

You would destroy the heroism and the beauty that have followed man through the ages, as well as the evil and the death. Of course, you may like Freud, so then I am suffering from nothing more than visions conjured up by that ol' devil sex. But outmoded or not, I believe in these visions, and they are what makes mankind a wonderful thing.

I say let's have more futuristic stories. More like Robert A. Heinlein's "The Green Hills of Earth," which crashed the slicks. Mr. Heinlein himself, in his introduction to the story in "My Best S-F Story," states that the story is "98 percent Rhysling (the central character) and two percent gadget." Bravo to Mr. Heinlein. For my money, Green Hills is the greatest . . . but THE GREATEST s-f story I have ever read. And (get ready to sneer, you gimmick-lovers) it's about a poet no less.

That's what I mean. Let's have more stories of adventure and heroism. Let's not leave out the devices, the machines of tomorrow. For they make a part of that world. But man makes the most important part. Why don't we have detective stories set in the future? Love stories? Stories of legends of historic figures yet to come? Tales of the entertainment world of tomorrow? The vista is endless, once we lock the laboratory door soundly behind us.

Naturally, these are just one person's opinion. But I hope this may start you doing a little thinking. S-f, it is true, is on the upgrade. But will it be a lasting part of our literary heritage, or just a momentary craze? I think the most important element in a s-f story is the human one, as Mr. Raymond Palmer, editor of "Other Worlds," told me one day. I agree with him wholeheartedly. But let's see what you think.—5300 Gleenwood Avenue, Chicago 40, Illinois.

You're right as far as you go except in one factor, John. You certainly plucked a couple of lemons in your gallery of "heroes," bub. Paul Revere was a very poor artist, a very fine engraver and metalsmith and a very staunch citizen of old Boston town.

But his famous ride of April 18th, 1775, was strictly a bust. He received the assignment along with Dawes as a routine chore in his work as a despatch rider for the then-beleaguered colonists of the Bay Colony. He and Dawes took different routes and reached Lexington together, where they warned John Hancock and Samuel Adams at about midnight.

They loitered in Lexington for awhile and picked up a companion, a Samuel Prescott of Concord, who was sparking his wench in Lexington (rather late too, methinks) and rode on back with them. Four miles from Concord they blundered into a British mounted patrol and both Revere and Dawes were caught. Only Prescott managed to get away to warn the Concordians to get their considerable supplies of munitions to safety and rouse the hinterland Minute Men.

Revere and Dawes were released later in the day when the British became too involved in their famous and costly retreat to care about prisoners. But heroes? Our editorial foot! Longfellow took a lot of license when he brought Paul alone all the way to Concord. Mind you, we were raised in Concord and know the facts.

As for Billy the Kid, he was a cheap little pathological Murder Inc. character

from Brooklyn, New York, who did his killing for money like any other hired assassin and was put out of action permanently while still a juvenile delinquent. Sitting Bull may have been an upright soul —we wouldn't know—but Davy Crockett was scarcely a noble character. Furthermore it was largely his bad counsel that caused the Alamo massacre.

We aren't out to debunk anyone who rates a legend—but we like our legends to have an authentic base in fact and character. Besides, heroes are needed by children, not adults— and this world has already been ruined by the refusal of too many of its citizens to grow up.

BRADLEY RIDES AGAIN
by Marion Zimmer Bradley

Dear Editor: What're you trying to do? Ruin my (alleged) reputation? Just for the records, dear Editor, that last letter to TRS was addressed to you from the Y.W.C.A.—the Young WOMAN'S Christian Association building. NOT from the YMCA as you so lightly printed it. Now how would I, Ia Zimmer, manage to get accommodations in the Young Men's Christian Association? I might pass for a young women Christian but I certainly don't look like a young man. You just ask my husband! I Christian or any other species, I couldn't pass as androgynous!

Since I am on the subject of women already, let me speak of Leigh Brackett . . . she's coming right up there with C. L. Moore in the apotheosis of fandom. If Ia Brackett doesn't look out, she will be my favorite author. THE DANCING GIRL OF GANYMEDE had the same wistful, haunting quality that C. L. Moore and Merritt expressed so beautifully. Maybe Mr. Hamilton had a hand in that. I wonder if he reads and criticizes Brackettyarns? Oddly, this latest reminded me of Moore's SHAMBLEAU . . . remember?

I had to gulp hard and swallow a few times before I could go on. This was admittedly a love story but a story containing all the elements of excellent fantasy—from a writer's point of view, nice craftsmanship; from a reader's point of view, beautiful, beautiful work. One rave—coming up—for Miss Brackett. I'm glad you used Finlay to illustrate her story; she is well worth it.

Norm Storer, I think it was, once wrote for a fanzine an article entitled "synthetic nostalgia" at which you chose to poke a good deal of fun. But such stories as DANCING GIRL OF GANYMEDE, her former SEA KINGS OF MARS, etc., have that power of inspiring nostalgia for a place that never existed—yet. Heinlein's phrase "The Green Hills of Earth" infects me the same way. So do the references to the days of lycanthropy, etc. . . . Maybe it all boils down to Boff Perry's gleeful "O Would I Were a Werewolf . . ."

Seriously, I've often felt that strange desire—call it escapism if you wish—to see and feel and hear the strange sights and sounds of alien planets. I think it very possible that women are more sensitive than men to those things. Brackett and C. L. Moore both have that odd nostalgic quality, which oddly enough is also possessed by their two husbands. I mean Hamilton and Kuttner. Those who have read COME HOME FROM EARTH, and the far-famed DARK WORLD (yes, there I go again) will know what I mean. Query: did Moore and Brackett get it from Hank and Ed, or did Hamilton and Kuttner get it from Leigh and Catherine?

Kuttner seems to be working through an Alice-in-wonderland complex. Give him a sword and let him work it off in an old-time fencing match—come on, Henry, how about another Sword-and-dagger fantasy for us? ? ? ? "VOICE OF THE LOBSTER"—Gaaaah! Henry, you baked this one too brown and forgot to sugar his hair!

Lead novel (WHEN TIME WENT MAD) is mad, bad and dangerous to know—but I liked it anyway. Have I got a time-twin? I wish she would turn up; maybe she'd have a cure for these Texas dust-storms . . . or something. There's fantasy for you . . . all the real-estate in Texas moving around with the tumbling tumbleweeds. Ever try to build a house on the sand that blows around in one of these here sandstorms? That's really a house builded on sand. . . .

Enough of my ravings—I must concentrate on a poem . . . a poem—here, Horatio—you tremble and look pale! This does not come under the category of fantasy. . . .

Ah yes! Hamlet! (As he would have soliloquized had he been a science fiction fan)

"Oh that this too too solid mag would melt
Fall and resolve itself into a dew
Or that the Editorial Drip had fixed
A canon 'gainst this Bergey; O My, My!
How weary, stale, flat and unprofitable
Seem all the illustrations of this mag!
Fie on it! Fie! 'Tis an ill-smudged cover
That flaunts to seed; BEMS rank and gross in nature
Possess it merely; that it should come to this . . .
Let me not think on it! Frailty, thy name is THRILLING.
Two little months, or ere the brush was dry
With which he painted that last lovely cover,
Like characters well-drawn—why he, ev'n he—
O Fie! A child, that wants discourse of reason
Could paint much better! Drawn this nonsense—
Ere yet the sketches of his better covers
Have left the cluttered wasteland of his desk
He draws this! O, most wicked speed, to post
With such dexterity this so-called "art" . . .
It is not, nor it cannot, be good art!
But break, my art, for I must hold my tongue!

How now, Horatio! You tremble and look pale; was that not something more than fantasy?

Seriously, I really like Bergey's work, and the cute little trolls or gnomes or Trogs or whatever they are on this cover are really sweet. Maybe they are representatives of that oft-mentioned Little Men's Chowder and Marching Society. Can I join? I can make good chowder. I'm not a little man but I live in the YMCA—or at least you think I do!—Box 1296, Levelland, Texas.

We apologize. To paraphrase Oscar Wilde instead of your Bard of Avon we might say, "A gentleman is one who never ruins a lady's reputation *un*intentionally." To that caddish fault we plead guilty.

As far as we know Brackett and Hamilton, to say nothing of Kuttner and Moore, were all well developed in their peculiar genre long before they hitched themselves into double yolk-yoke, what? Perhaps it was certainly matching qualities, revealed at least partially in their work, that caused the mutual attractions. We wouldn't know —and doubt that any of them do either.

After all, nobody yet has ever sat down and analyzed his or her own marriage with detachment—and managed to stay married long.

Incidentally, you still like Henry with his cute little sword—well, you seem to be asking for it but not from us—we've already had our say on that one. As for your soliloquy, we don't remember enough of any of them at this late date in the afternoon to come up with an answer that will bear scrutiny.

So, holding our own skull in hand we can only say, "Alas, poor editor, we knew him . . ."

In fact, we're beginning to think we knew him a little too well. We're going out for a troll.

THE SEARLY ONE
by Bill Searles

Dear Sir: You really had an extraordinarily readable Feb. issue. Let's hope you keep it up thru 1950. But during '50 for goodness sake, don't try to equal the quality of the cover. In fact I don't think you could sink that low again. The cover was very accurate but my word! I'd rather have a decent cover—that did not have a thing to do with any of the stories.

"When Time Went Mad" wasn't a classic but it was interesting. The novelets were the best you've had in months. I preferred "The Dancing Girl" to the others, and the ilo too. If only her nose had been a little shorter.

"The Greater Conflict"—Part 3 of how many? Hmmmm? I wish all footnotes were as interesting as those for "Voice of the Lobster". Funny!

As for the shorts I still don't like your "salvage" series. And—Oh, dear—why does Bradbury have to be so morbid. But he is wonderful.

Of course, the best part of the issue was your news of the new mag. Golly, four new mags in as many months! S-F sure became popular. I don't know whether I like it or not.

I'd like to end, at the risk of inserting "pen-pal" stuff, by asking for teen-age correspondents seriously interested in stf & fantasy. Thanks.—827 Nathan Hale Road, West Palm Beach, Florida.

So far THE GREATER CONFLICT is the finale in the Peace Engineers series. The rest is up to Mr. Jones. Hope you get your pen pals, Bill.

OH, WELL
by Richard R. Smith

Dear Editor: Greetings and salutations. In your SCIENCE FICTION BOOK REVIEW, I notice that you have a handful of good comments on Oscar Friend's THE KID FROM MARS. What happened? Everyone else thinks the book is awful.

The cover looked more mature than per usual. Think the reason is that Bergey usually makes the gals tiny so he can paint them from head to toe (heh, heh) and such facts makes the cover resemble a juvenile comic strip or something. Anyway, I don't care and I like Bergey's painting. The lad's got talent. Someday, I hope, the publishers will let him paint a science-fiction cover. Just imagine seeing something like two metallic robots fighting to the death on the cover of TWS or some other inspiring science-fiction scene.

You once said that WHEN TIME WENT MAD was a story that moved. It did. In fact the whole story is one continuous stream of action and dialogue. Background is varied but sketchy. One very interesting sentence when the hero says "I don't know anybody named Ron Dineen." No wonder. Ron Dineen hadn't told him what his name was. Same stunt was pulled later in the story. This was a very good story, however.

PAYMENT IN FULL was fair. Ray is really wearing this theme thin. Did you ever notice that Bradbury's stories are almost always the same? They are ideas, impressions rather than regular plots with conflict and action. Oh well, who cares? Hmmmm? SPECTATOR SPORT: John D. sure loves to spill blood. Guess he got it from writing for the detective pulps for so long. Was glad to see Hank and Leigh back. Both good stories.

TRS: So you bought a story from Erik Fennel? When ya gonna buy a story from me, huh? Sob, sob. I'm beginning to think I should have spent my money for a bicycle instead of a typewriter. No comments from the audience, please.

Thanks for saying my letter was "extremely intriguing." It wasn't really. Sorry about the first two lamentable paragraphs. You mention the few stf movies and video shows that have so far seen the light of day. I don't count them at all because they are really freaks of nature or somethin'. What I mean is that someday the movie industry will be able to turn out a stf movie just as easy as it can at present turn out a detective movie.

Right now, it would be rather hard for a movie to show a spaceship hurtling through space. How could they picture a dimensional abyss? How could they picture infinity being split in half? Even a story like WHEN TIME WENT MAD would be almost impossible to be turned into a movie. The different backgrounds would be too expensive.

What I meant was that someday the movie industry (maybe with atomic energy) would be able to produce stf movies on a wide scale and in such a manner that would appeal to a mature audience.

Where is Chad Oliver?

Well, I got nothin' more to say so I think I'll end it all. I'm getting a headache, anyway. A bunch of buenas noches to you and you and him and her.—6 East 44th Street, Wilmington, Del.

We have made all the comment on Bergey we intend to this trip, Dick. As for that Ron Dineen business—well, he probably had him confused with Bill Dineen, the former Red Sox pitching great and American League umpire. Bill won three games in the first World Series ever played and deserves such commemoration.

Why not send us a story we can buy—preferably delivered by bicycle?

We have given considerable thought to the problem of making movies of some of the less mundane aspects of stf. In THE LOST WORLD and again, to a lesser degree, in ONE MILLION YEARS B.C., Hollywood manages to portray dinosaurs effectively. And the giant apes were not too absurd in KING KONG and MIGHTY JOE YOUNG.

But mere giant beasts, misplaced in time, are hardly stf although they represent a tiny facet of that fabulous jewel. In the June SS, which we hope most of you have read, we featured John D. MacDonald's WINE OF THE DREAMERS. Now how could Hollywood show the dreamers in question without provoking a combination of yawns and titters that would empty virtually all theaters?

We wouldn't know. We await the Heinlein moon-movie with interest, are even more interested in the response it invokes generally. But we fear that both Hollywood and the popcorn public are still a long way from large-scale production and acceptance of the more abstruse and intriguing (that word again) aspects of science fiction. We only hope this lamentable condition is extremely brief.

AFTERTASTE
by Bob Silverberg

Dear Editor: For variety, I'm writing you after I've read your mag, not before. I thought the February issue of TWS is one of the finest you've had in months—altho this ruined a letter I was going to write next month about how all the really good stories seem to gravitate to Startling Stories. Well, I'm glad you spoiled my letter-idea so admirably.

Bergey's cover was—well, you know Bergey. But since he's switched to redheads I think he's doing a better job. The color of the February cover appealed to me, if the artwork didn't. Bergey selects eye-pleasing tones, all right—it's just what he does with them that causes so many fan-gripes.

The stickout story of the bunch was "The Voice of the Lobster," by old HK himself. I don't know why—it wasn't the best nor the most carefully constructed. But I enjoyed this story for a number of intangible reasons. Kuttner, and all his alter egos, is one of the prime exponents of fantasy in his works—even in his science-fiction.

There is a trace of whimsy in most of his writings—even the "serious" ones. In your magazines he specializes almost entirely on fantasy, and does quite a job of it too. I've followed his work in five magazines for a long time and enjoy each story. Kuttner has risen to one of the top posts in science-fiction.

As for the other stories, "When Time Went Mad" was another of your plotless masterpieces. It was at times hard to follow the action, harder to watch the plot—but it was a good story. Time Travel is one of my pet themes in stf. Heinlein's (I resent your calling him a "moderately well-known stf author" on page 8) masterful "By His Bootstraps" is one of the best stories I have ever read—since that time, I've given time-travel stories special preference in my mind.

Therefore, I can't knock "WTWM" too much—it contained some interesting ideas, though I doubt many readers will gain pleasure from the idea that a semi-human Trog will continue the destiny of humanity while the 'bove-grounders are wiped out. Kuttner is an old-timer—I'm not. So I haven't read much of his stuff. Wylie is a good writer, but one who tends to juvenilize his plots to where they reach the stage of adventure story—the collaboration of these two might have produced something better.

As for the others I have room for but a few brief notes—how many more Meacham sequels do we get? I know Jones gets more money this way and I can't grudge him that but they could have been woven into one novel and printed in SS. SPECTATOR SHORT was the outstanding short—it's

amazing how MacDonald can turn out the goriest hack one issue and then come back with a brilliant piece. Bradbury is Bradbury, and there's no criticizing there. Ray is almost thirty, I understand—he sure has embittered himself against humanity in that time if his fiction is any index. I don't care too much for Cartmill's latest series (yes, drop the rusty salvaged metal on my head and beat me but I stand firm). Too much spacehack for me. This Ettinger sounds like a pseudo to me—too many initials—am I right?

Now for the speaking of the readers—I pick up a 1931 "Wonder" and found you kept the same title for your letter page down through all this time. Didn't think so. The reprint mag sounds like a good idea—you'll have one supporter (me) at least until the second ish. More next month about my opinions.

Heinlein's review was good. You ought to let more authors handle this department. Bonestell's book (I was lucky enough to get a review copy free) is really a masterpiece. (Excuse the mistake in last sentence—I mean Bonestell and Ley's book and I'm not being sarcastic—mistakes do happen, you know.

Kuttner coined an interesting word in "Lobster"—"inhumanoid!" It's going to be a useful word during the era of space-travel, believe me. Incidentally, Mr. Editor, in regard to Storer's letter p. 149, and your poem following it, "Hieroglyphics" is spelled that way, and not "heiroglyphics" as you or a proofreader spelled it.

FRYING PAN: Editor, you'd make a lot more friends if you'd turn this into a straight-review column, thus cutting down the four-month time lag of SS, instead of insulting the mags. In this way you've lost the friendship and also discouraged many fanzine publishers. I've tried to defend you in FAPA but aside from the stories in your mag you'd be boycotted there.

Well, I've got about four more pages of stuff (never used to be so loquacious), but I'll save it for next month. See if you can find room for this.—760 Montgomery Street, Brooklyn 13, New York.

Bob, we were clowning when we termed Heinlein as "moderately well-known" and you should have sensed the fact. We agree on Kuttner. Jones wrote THE ALIEN MACHINE, first of the series in question, as a one-shot—then asked if he could write a couple of sequels that had come to mind. So it never really had a chance to be a novel. But the same author has a honey of a big one coming up in SS shortly. We bow on "hieroglyphics" and it was only a proofreader's error in letting ours get through. Funny—always thought it was spelled the other way. Perhaps the dictionary is wrong. . . .

Why should anyone get irate over the japes and jests in THE FRYING PAN? You lads dish out the criticism with a heavy trowel when the mood is upon you and we don't even wince. Furthermore, TFP is not always critical. So as long as we spell your names correctly, no beeves, please.

WHEN BECK WENT MAD
by Calvin Thomas Beck

Dear Mon Ami Ed.: You are to be highly congratulated on your commendable editorial in the February issue of TWS—the best one you've written (or did you?) to date. Personally I'd prefer if you would stick to announcements and newsworthy items regarding STFantasy and its realms of activities rather than try to ape one of your lesser competitors.

Albeit, from my viewpoint, I was pleased no end in reading of the fact that WE, the old guard and perseverant followers of SS and TWS, are to be rewarded with another stellar attraction from productive offices of your erudite and well established company. So take a bow, dear old instigator of good & bad SF stories, take a bow for your interesting editorial. . . . (O K, O K, that's enough bows—let me cut in. . . .)

Variety, they say, ". . . is the spice of life . . .," and since we were presented with a splendid variety of myths, fiction and tales (that all means one thing, don't it?) in the Feb. TWS, there can't be any vitriolic comments from anyone stating that the format was monotonous—or can there?

WHEN TIME WENT MAD, got this particular reader pretty mad. As I once stated, even the most entertaining theme of story-matter can be overworked once too often. The time-machine or subconscious-telepathic-travel form of story has definitely been overdone a bit too promiscuously of late.

This would not be in bad taste if the majority of the lead-novels followed other patterns of STFantasy channels—but I doubt if I could exaggerate if I declared that nine out of ten of your longer novelets & lead-novels have fallen into the unmistakable category of the "Dimensional-Spirit-Travel" type.

Incidentally that once "was" my favorite form of SF reading matter, or, at least, one of my top favorite SF classifications. . . . It still could be if, and only IF you'd switch format and categories of theme around a bit more, especially for the feature novel and if you could put your overdone themes into the novelets and short stories, where they could rest up awhile and read better in more shortened form.

DANCING GIRL OF GANYMEDE was a bit of O K (woof, howl!)—the story as well as the picture, and though an old theme, it had new setting and style done in the inimmitable manner of Brackett to make this the top story of the Feb. ish.

THE GREATER CONFLICT: What hero of this tale is the namesake of what famous fan club director? If not for the latter occurrence, this little story would have tied with First place on the above item. . . . Guess I'm a bit biased—can't help it!! Odd, isn't it?

VOICE OF THE LOBSTER would have been better; but Kuttner the Hank fell down very much so on this essay of his—and of all titles, to make things hackier; why didn't he come right out and hammer on "Voice of the Terrapin" as more opposite of one B'way play called the "Bark of the Tortoise." Heck!

DEAD RUN—to be frank (I'm really, Cal) the "Space Salvage Series" are getting to be beyond comprehensible, intellectual and purposeful use and are unsalvageable. Friendly advice—Take Cartmill away from 'em and have the boy do something fine as he's done in the past.

SPECTATOR SPORT has been done before and a real oldie of a theme. It might have been one of the top SF tales of the year, since the composition and tempo of movement was excellent—BUT, (a) the story was too short and (b) there was no moral or definition to the ending.

THE SKEPTIC—this was one of the most literally logical stories of SF that I've read out of the several thousand tales covered by me in the past. It is true that action and adventure were at a minimum, and it is evident that the author (is Ettinger new to SF?) hasn't had a large background of a story-selling career. However, the basis and the theme of this composition would be hard to outdo in its capacity of worthiness anent, in its introduction of the hypothesis of "Mind Over Matter," something entirely new to the general masses although known for generations among philosophic personages.

PAYMENT IN FULL—I have admired Bradbury's fictional characterizations and style very much in the past for their entertainment values, and will still keep on doing so, keeping him in mind as our Fair-headed Boy of Fantasy. But I must disagree with him on the suppositional postulation of his story, since MAN is NOT the monster some think him to be.

It is Man's leaders and those in charge of his life that are to blame for many of his vicissitudes, whether directly or indirectly. Man can turn into any form of beast through the derangement of his faculties applied by the ones who possess more power than they are capable of handling correctly. Otherwise, when the normal man is left unto himself to do as he wishes under potentially proper leadership, Man can become eventually as his Creator.

I would personally be glad to dispute this contention with anyone having the temerity to oppose this belief. Aside of that I note with no degree of surprise that the Brad of Bury once again located his latest SF scenario on the planet Mars—still? Who wants to bet that it won't take place on Ares again? When his next story appears I mean!

Ann Nelson's quotation Re "Divine Destruction" deeply intrigued me anent that promiscuity of using "Le Bon Dieu" matter-of-factly. But my opinion is that ". . . those that are mad, the Gods destroy later . . ." n'est-ce pas? I'd like to get into this much further with all gusto, and I believe that I'll further dissertate this theory with Mrs. Nelson at the conclusion of this epistle.

I agree with Erik "Red" Flannel about overloading, eventually, our mag with too many of the inane fillers that have just about ruined one of your competitors. But, when they come to articles by the one and only Willy Ley, THAT I could never consider myself big enough to dispute. So, no commonplace fillers of 25 or 30 words per item, but MORE, definitely more, articles by Ley, even though they run to novel-length proportions.

All in all, a pretty perfect issue of TWS and one of the best two issues within the past twelve months, since there was a variety of stories and, for a change, a highly intellectual gathering of fan mail in the Peruser Orates. I've also noticed that there has been a trend lately of Ye Edds growing a bit high-brow in his comments. Also that the

letters printed have evolved to more serious discourses. That's O K but leave us not overdo it and bud into a dead-pan pseudo-serious publication or try to emulate one of your rivals who has been in the former latter category for six or so years.—P. O. Box 1571, Grand Central Station, New York 17, N. Y.

The quotation, Cal-Tom, is, "Whom the Gods would destroy, they first make mad." As for your "Dimension-Spirit-Travel" category, what in hades is that? It sounds dreadfully involved.

Since several of you have asked about R. C. W. Ettinger, here goes—In the first place that is his real name and he is no relation to our art director, Churchill Ettinger. Actually he stems from Detroit, is the nephew of the wife of jazz clarinettist PeeWee Russell, was a captain in the war and was wounded.

He wrote the two stories we published —THE PENULTIMATE TRUMP and THE SKEPTIC—while convalescing in and out of Army hospitals. Unfortunately he is a red-hot scientist and seems more bent upon pursuing dat ole debbil nuclear fission than nuclear fiction. Which we feel is a pity.

As to man matching his creator—well, he still has a long way to go. Watch out for words in your next epistle, Cal-Tom.

TANTARA
by Clifford Dye

Dear Editor: Why the devil should I say "Dear"? Can you imagine anything more silly than my calling a big fat —ah umm—calling you "Dear"? I know, you can. Okay, what is it?

Well, as I started to say, it is a little after two ayem on this lovely morning of December 4 and I have just finished the latest issue of TWS (loud dramatic voice accompanied by roll of drums and blare of trumpets). Having thoroughly digested it I have a pain in my viscera—and am now prepared to make a few comments anent said TWS.

I'm sorry to—that's a lie, I'm glad of the chance—to say that it wasn't a very good issue. It is rather difficult to pick the best story but I'll try to rate the four best (Oh, no trouble at all).

"No Greater Conflict"—This is the wrong time of day to criticize a good story, so I'll just say I like the series. This is the end of them, no?

"The Dancing Girl of Ganymede"—Not good, not bad. I've never completely liked anything of Brackett's since "Shadow Over Mars."

"When Time Went Mad"—So-so. So.

"Payment In Full"—This one did not take.

Glad to see Friend's "Kid From Mars" in book form. It's a darn good story. Friend, by the way, is one of the few writers who uses green Martians. To me that makes more sense than red ones. Albino fish are found in caves, Earth is a blue-green planet, all Earthmen are red of varying shades. "Opposite and equal reactions." The fact that it is a misplaced quotation doesn't necessarily mean it is untrue.

I read somewhere the theory that the Martian canals might be to carry air currents instead of water. If so the higher class of Martians would live closest to the bottom of the canals. Just the opposite of life on Earth. Let's go down to my subhouse and look at some etchings.

This growth of s-f. Will we lose the friendliness that is buried in the back of science-fantasy magazines now? It's an awful thought.

This is the second mag I've had to buy on the stands this month. What is the use of a subscription if this is going to happen? Set a fire under the circulation department. Better yet, set 'em in the fire.

I made a mistake. Both of aforementioned mags came out last month.

In fifty years we'll be saying "2000." I better practise.

None o' these people writing now seem to have been reading stf more than a couple of years. Young'ns. No one mentioned that West's "Lure of Polaris" was a sequel to another yarn.

You misspelled my name the last time I wrote you. On your knees! Three-oh.—P. O. Box 2382, Williamson, W. Va.

Neither you nor Manly Banister seem to have understood Bradbury's story at all. It was, to us, both tragic and singularly effective. And pardon us, but what was West's LURE, ETC. a sequel to—or should we say of?

DEM DWARVES
by Dave Hammond

Dear Editor: I have read your latest production and, as is my custom, I am writing a letter to you.

This month's cover really gave me a shock. Santa Claus' helpers are running wild, I thought, but I am afraid I must give the Earl of Bergey his due: The cover was good, (Good for Bergey) but, just for spite, the next issue will be so blinding that I won't be able to look at it without sun glasses.

Bill Searles asks who is Bergey. Hah! I will explain it to you, Bill "and a few hundred other readers." A few months ago my cousin from Pennsylvania paid me a visit. I was showing copies of some competitors to her (Yes, HER. She's twenty years old and engaged) exclaiming over the beauties of the covers. I finished the stack of competitors and turned to the (ugh!) pile of TWS's and SS's. I said to her: "These aren't very good, but I think the stories inside are swell."

Betty (my cousin) looked at them and found the artist's signature. "Earle Bergey," she said. "I know him!" And sure enough she does. She gave me some very interesting information about the Bergey-man; information that I don't think it would be proper to report here. If you are really interested, anybody, write me letter and I will let you in on the secrets.

I had a letter published by the daring editor in the January SS. I have received a veritable avalanche of letters and now have fifteen members contributing with funds and material to our fanzine which, dear editor, will appear on your sacred desk. By the way, readers, this fanzine is strictly for teen agers and it isn't too late to join now.

Now for the stories: WHEN TIME WENT MAD wasn't a bad story, in fact it was pretty darn good. The only thing I didn't like about it was one of the authors' complete names; Frederic Arnold Kummer, Jr. Putting a middle name in is bad enough. but that "junior" on the end topped the whole thing off.

Since I like to draw, myself, I will give you my deathless and invaluable opinions on the artists. The illos for WHEN TIME WENT MAD were by Finlay, hence: they were good! Astarita, as I said once before, is strictly from comic books in style, and the pic for DEAD RUN is no exception. Finlay's job on THE DANCING GIRL OF GANYMEDE was good, but how did those "howling bounders" get into the act??

One comment on Bradbury's story: I am not sure I liked it, but I will never forget it.

I am glad to hear the news that you are putting out a separate zine featuring stories that might have been destined for the Hall of Fame in SS. Does this mean that you are going to cut out STARTLING's Hall of Fame? I await, with great excitement, to read this reprint zine. Hey, you rat, why don't you tell us the name of the new zine? Or didn't you make it up yet?

I have said, many times, that I like Finlay. Since I do, I study his pictures carefully. If you look at all (or at least most) of his illos published prior to the February 49 ish you will discover that Virgil has most of the gals concealing their hands, but in the current issue he reverses all precedent. It's a mean thing to say but: did Virgil just learn to draw hands?

Incidentally, Editor, you certainly cut my letter to shreds, but I don't mind you censoring the stuff as long as "Dear Editor" and "Yours truly" are allowed to stay in.

Did you read that wonderful poem by Del Close in the Feb ish? He is a member of our club as is also Brian McNaughton.

That book review in your editorial by Heinlein certainly set me off! Know what I wanted for Christmas? Answer: "The Conquest of Space" by Willy Ley and Bonestell.

You said you liked poems. Well, the following is going to definitely change your opinion. For your post-mortem, at great expense, the management presents:

The Time Machine

Dangers lurked, the scientists worked
Night after night.
The thing might be wrecked and so they checked
To make sure all was right.

Money they had, but they were glad
When it was finally done.

They all took a rest before making the test
For they thought that their goal had been won.

Then came the day and the papers did say,
"The barrier of time is defeated!"
But the thing didn't run and it spoiled the fun
So what they said next is deleted!

I don't know what form of poetry this is and I don't care. So there. This letter is beginning to get lengthly and so I will cut it here with a fond farewell as I slip below the horizon, but I shall return!—806 Oak Street, Runnemede, New Jersey.

Oh-oh! So you don't like Jr.'s in byline form. Well, speaking as one ourselves, may we enter a rebuttal? We shall anyway so . . . It happens that Frederic Arnold Kummer is one of the very well-known literary names of the first four decades of this century.

Naturally, when his son of the same name set out upon a writing career, neither he nor his sire wished to be confused with one another. So the Jr. comes into use and stays that way for identification. Classic example of course, is Dumas, fils (or Jr. in French to you), son and namesake of that old D'Artagnan and Monte Cristo man, who himself won fame with *Camille*.

Our young hero smiles at his lady love's
wiles,
Bright, oh so bright,
As her charm was unchecked, she was
thoroughly necked,
Till her lipstick took flight.

But her judgment was bad, her escort a cad
And though it was fun
Why, right on the crest, he spoiled all the
rest
With a very bad pun.

So she said, "Go way!" and the idiot did
pray,
For a chance to go back and repeat it
But the lady did stun this hapless crumbun,
Saying, "Brother, you'd better delete it!"

Which is exactly as far as we're going to go for now. Next, please.

DON'T ASK US EITHER!
by Michael Wigodsky

Dear Sir: Here I am again. Don't ask me why though. I couldn't tell you. It isn't because I like writing letters—I don't. It isn't because I have anything interesting to say—I don't. Egoboo, I suppose. Not that my ego needs any boosting—it's as high as the sky. On to uninteresting comments having some semblance of revelance:

1. "The Dancing Girl of Ganymede".

I wish I knew why I think this story the best in the issue. By all usual standards several of the others were a great deal better. It can't be that I was unusually receptive to something-or-other when I read it, because I didn't expect to like it and didn't intend to try. Perhaps it was the shock of finding it so much better than I expected.

The same sort of thing happened a couple of years ago with "Transuranic" (Pause while I reread "Transuranic"). I find that it was about as I thought. A really excellent story—but only on the last page. Rather Lamarckian, too. Perhaps by 1951 I'll feel the same way about TDGOG. Right now I haven't quite recovered from the impact. [(And that's a bad choice of words. Impact (used of a story) is usually in terms of originality, and there was little that was original in this (To a certain extent, it reminded me of "Let There Be Darkness." Why doesn't some stfant publisher bring out a collection of C. L. Moore's stories?))

2. "The Voice of the Lobster."

Let's praise the Tao from Birnam wood,
Who wouldn't pay when others could;
We plaud with battle with Ess Pu,
And twist a nose at spygghi's pugh;
Throughout the ship the seeds had stank,
But when do we get more of Saunk?

3. "Payment in Full."

This little medley would have rated higher if I hadn't read most of Bradbury's earlier Martian stories. This was a cross between "Off Season" and "And the Moon Be Still as Bright" with dashes of a few others.

4. "When Time Went Mad."

The only reason this placed fourth is that the remaining four stories are so much worse. Confused and confusing.

One comment: Last issue's cover illustrated the issue's novel. This issue's cover illustrates next issue's cover. This can't go on forever, you know.

5. "Spectator Sport."

No comment.

6. "The Greater Conflict."

N. C.

7. "The Skeptic."

Ugh.

8. "Dead Run."

Ugh ugh ugh ughughughughughughughughughughugh.

The new magazine: Only one suggestion. "The Time Stream" was printed in a very small edition and has been out of print for over two years. So please, huh, please?

And now to the important part of the magazine: The Reader Squeaks—and I find that suddenly I ain't got nothing to say. Come to think of it that's not so sudden.—1016 West Gray, Houston 6, Texas.

Let's laud Wigodsky to the skies
If from this Earth we can him prise
His letter moans and groans and wheezes
In multiple parantheseezes.
A blast-off to his feet we'll tie-on
And jato him out past Orion.

SHORTY
by C. R. E. Taaffe

Dear Sir: This is the first time I have written to any magazine and I probably won't write again for a long time. the reason for this one is to tell you that I like the humorous stories you have been printing including the Oona and Jick series. It is my considered opinion that too many fans choose to ignore the everyday problems of living in the future. They would be profuse if conditions today are any indication.

To illustrate, a recent humorous article ended with "The modern house-wife will fire the maid and hire a mechanic." I leave the conclusion to your able imagination.

The stories in order of preference are:

1. The Voice Of The Lobster
2. Dead Run
3. The Greater Conflict
4. When Time Went Mad.

The rest were "almost mediocre" except Payment in Full which was DETESTABLE!!!!!!! Thanking You Until next time the mood oozes over me.—432 Hopkins St. S. W., Atlanta, Ga.

Easily shocked, aren't you, bub? But we're glad you like humor in stf. We do ourselves—as the contents of either or any of our magazines during the last five or more years will reveal. Write us again when oozing season comes.

TEMPORAL SNAFU
by Morton D. Paley

Dear Editor: Varlet Lout! Scurvy knave! How darest thou not print my epistle! Wilt thou deny true literature? That such a day should come to pass in the historie of Ye Storyse Thrilling & Wondrouse! But mayhap my missive ran afoul in the mail and with this thought I do console mineself.

Switching from Old English to the more convenient form of the tongue, I found TWS good, though not exceptionally so, even without my letter. Among the stories, Kuttner's

"Voice of the Lobster" takes first place, with "When Time Went Mad" being second. But one mild objection to this and all other time travel stories as well. They don't take one factor into consideration.

Let's say a time machine is invented in 2,000 A.D. Because of this, time machines may exist for thousands of years thereafter. As the tiniest fraction of a second contains (hypothetically) an infinite number of time-worlds and there might be thousands of years having time machines, the number of time-worlds with time machines might be a term with several trillion (if not more) as the coefficient and infinity as the base!

Travelers, fortune-hunters, fugitives, thrill-seekers, etc., would be rushing around in the past, present, and future, changing the course of history, destroying and creating time-worlds and causing general pandemonium. Since the number of time-worlds with time machines is already at least several trillion times infinity and there might be many travelers from each time-world—well, figure it out for yourself.

The other stories were fine, except for "Spectator Sport," which was stolen from another sf story whose name and origin I have forgotten.

Having been inspired I have stooped to the lowest level a fan can descend to. I have written (gulp!) a poem—an unrhyming rhyme. (Any resemblance between this and "Hiawatha" is purely incidental.)

By the shores of Thrilling Wonder,
In its splendid, shining hallways,
Sit —— ———, Sage of Standard,
Monarch of all science-fiction.
Here he sits in his resplendence,
Reading gems of thought by Kuttner,
Reading, writing, stories golden—
Epics of scientifiction.
In one hand his mighty scissors,
On his nose his best bifocals,
And with these he maketh promags.
With these he maketh luscious leaflets.
And this reading loathsome stories—
This printing (hint) of schmoes' fanletters,
This glancing at lurid artwork,
Has it ruined his disposition?
Has it turned him sour and spiteful?
Yes! For in TRS he writeth poetry!
Poems that are so very corny
That they fill us all with horror.
Poems that are so badly written
That they must end as this does—
Out of mercy for the reader.

—1455 Townsend Avenue, New York 52, New York.

Your letter was late last time, you churl, and furthermore we don't wear bi-focals or glasses of any sort. Ah, vanity—!

Lurking in his hallroom dingy,
High in attic, 'hind the furnace,
Or mayhap in cell well padded,
Cower the writers to this column
Narsty writers to this column.
Nothing like they better than to
Make of us brochetted dishes
On a skewer do they mount us
Diced in dainty two-inch pieces
Laminated twixt old mushrooms,
Bits of bacon and tomatoes,
And into the fire they put us
There to sizzle to infin'ty.
Then at last these narsty writers
Narsty, narsty, narsty writers
Open up and let us have it
Ope both barrels, let us have it
Blast away and let us have it
Fried potatoes on the side
And they show us nought but scorn
When as veg'table they get corn.

WHATAPOEM!
by Shelby "Japorub" Vick

Dear Bill:
An insult is in order.
I am continuing my policy of isolating important nouns, etc.
Why an insult? Because of your inference that
I
am emulating archie. There is no similarity. The
spacing
is deliberate, and is supposed to mean something. Besides that, archie was a cockroach, while I— Hmmmm. . . . Seems to be an insult on both sides of the fence . . .
WONDERFULBERGEY!
(Hard to believe, but it must be him. His kind of ray pistol, his particular type of clothing on the
girl.)
Whatacover!
Now, then;
you,
Bill—or Joe; anything but Editor—once more.
WONDERFUL!
is uttered. Even a
GREAT!
or two. What an issue!
WHENTIMEWENTMAD
Andwhatastory!
Next, comes a refusal; a stand of adamancy. The three novelets will not be graded separately.
I
will not admit to liking one of them better than another.
THEDANCINGGIRLOFGANYMEDE
THEGREATERCONFLICT
THEVOICEOFTHELOBSTER
were, every one of them,
SUPERB.
Length
was all needed to make them rival the novel.
DEADRUN
PAYMENTINFULL
also tied. In fact, it was a hard battle not to include them with the novelets. They were
very
very
GOOD!
But there was no trouble with the last two.
THESKEPTIC
was definitely above
SPECTATORSPORT
It wasn't all
MacDonald's
fault, tho. He had tougher
competition
than usual.
Virgil's
first illo was good.
Ditto
for the one for the
Brackettale
and almost the same for the illo for
Kuttner's
story. But now comes the (urk) picture (and the word is used lightly) on page eighty-one, illustrating
MacDonald's
story. It was absotively, posilutely the worst of any crop yet.
Why, even old
Mark
did stuff above that
I
TRS:
A few of the
Oldtimers
combined with a good deal of the rising crop of newcomers
made it interesting, and
your
replies
were all up to
par.
Well, this seems to be all, for now. G'bye, from
me
(the original, accept no substitute) to
you.

—Box 493, Lynn Haven, Florida.

Okay, Ole-o, so you
Hadda sound off a-
Gain!
And again we had-
Da take it and smile and
Pretend to like
it.
However since you
Weresokindtoour sto-
Ries an
Answerisindicated

And this is
It.
We thank you and
Herewith send you (ex-
presscollect the
Bill with which your
Salutation belabored
Us.

UNGANLEY
by W. Paul Ganley

Ed: Hah! I'll bet you thought you weren't going to get a letter from yerz truly this time, O Sage of the Empty Xeno Jug. Well, this just goes to show how wrong a guy can be. I've been so busy that I haven't had TIME to sit down and write an epistle to a magazine.

WHEN TIME WENT MAD was the second best story in the issue, second, namely, to Leigh Brackett's DANCING GIRL OF GANYMEDE. The ending to the latter was a little vague but it was a superb story.

As a matter of fact Editor, all of the stories in this issue were up to par except Bradbury's. I bet you just hated to reject one of his stories!

Your reprint mag shocks me—don't tell me you are actually going to put out one of those hated and abhorred reprint things! (Didn't you once make some cracks about FN and FFM?) Well, good for you, anyhow! Now you can remove the Hall of Fame from SSS and put in two long novels each ish, one of them a CAPTAIN FUTURE story. (I'll bet you ignore my suggestion.)

I shall say nothing about Dave Hammond because I have already said it privately. But he's wrong, just for the edification of the feud bugs who creep in now and then. He's half an inch taller than I.—119 Ward Road, N. Tonawanda, N. Y.

PS: I don't believe in ESP. Anybody wanta argue?

We remain to be convinced, W. Paul, old topper. Furthermore we suspect that whenas and if it is defined, controlled, et cetera, it will be discovered to be non-extra-sensory at all—but merely the development of a perfectly prosaic sense currently lying ground hog dormant. And for the record we have bounced more Bradburys than we like to think about, for all that he is a brilliant talent.

PROPERGANDER
by Ed Noble, Jr.

From one Ed to another, greetings: This effort finds itself upon my tripetyper for two reasons: (1) As Correspondence Manager of the ISFCC (International Science-Fiction Correspondence Club) one says m' duties should be to help propagandize the high qualities of ISFCC (and could there be any other qualities—such a thought!) and (2) TWS has come out with an exceptionally fine conglomeration of tales in this, the February issue. Even "When Time Went Mad," with its temporal elements galloping from hither to yon and everyplace but Oblivion was more readable than most of 'em.

Mr. Kuttner's "Voice of the Lobster" was a refreshing variation of the usual Kuttner tale (which might suggest I'm anti-Kuttner, but not—sometimes he's good—sometimes awful). The Brackett "Dancing Girl of Ganymede" was another good job and altogether 'tis difficult to class 'em in any other category but good. This may be an issue which I shall hold back and not send to Europe after having read it.

Anent the ISFCC, the club's 'zine is now in operation, and new members are a part of the '50 idea of expression. Swapping of ideas, letters, etc. is the general idea, though there's more to it than just that—it's international, with members from Holland to Australia, so that new members can locate far-away lands for idea swapping if they wish. Anyone interested should write to Lawrence Kiehlbauch, Rt. 2, Box 225, Billings, Montana. He was elected president at the last election. A library and "The Explorer", the club paper, are other parts of the club which may be of interest.—Girard, Penna.

You really believe in classifying "but good"—don't you EdJr? Seriously, here's hoping you get your letters.

BETTER NATE THAN LEVER
by H. S. Weatherby, HM1, USN

Dear Editor: I'm late, this time, with my review of your fine stories in THRILLING WONDER. Reason? Well, there's a little matter of my attending Hospital Property and Accounting School, way down here at Portsmouth, Virginia. Gad, is it driving me nuts! Despite excellent instructors, good living quarters, etc., have you ever studied a subject that was so dry that you felt it a God-given privilege to return to your typewriter?

Gulp, it makes me feel like I'm diving into cool water. (Plug for that musical number.) But they've favored this fan by giving him the gossip column to write for the Portsmouth Hospital's COURIER. That's some satisfaction!

As Bill Searles says, "Bradbury is as good as he'll ever be!" And I agree. Bradbury takes top honors with his "Payment in Full," although it's merely a short-short. You hand that guy a plot or just three characters and he'll keep your interest to the very end of the yarn. Why doesn't he write a novel for T.W.? Am I psychologically correct in assuming that Jones, Williams and Comfort were mental?

"The Voice of the Lobster" by Henry Kuttner took second place with its humor aboard a spaceship and along with the sphyghi festival. I really enjoyed this story.

"When Time Went Mad" by Dirk Wylie and Frederic Arnold Kummer Jr. was nicely written. It was a rapid action adventure stf but somewhat reminiscent of R. F. Dikeman's "Echo From Eternity" in SHIVERS. Now this is one time when the fanzine tale came before the prozine story. Finlay's illustrations are, as always, excellent but why can't we have them larger? He's too super to waste.

Now for "The Dancing Girl of Ganymede," an interesting novelet by Leigh Brackett—although well-written in spots the theme wasn't universal and seemed unreal. Sorry! Try again, Brackett.

"Dead Run" by Cleve Cartmill had excellent characterizations, believable backgrounds, rapid action—just about everything you could ask from a short-short science story. May we have more of his style? Incidentally Astarita is a fine illustrator.

"The Skeptic" by R.C.W. Ettinger was very good for a beginner although some weakness was discerned in the sentence construction. Suspense was here. May we have another story by Ettinger?

And now for the greatest blow since television took over—"The Greater Conflict" by Raymond F. Jones was so poorly written that I had to force myself through the darned thing to its end. Why, oh why, can't these mass production authors learn that not all of us readers are morons, first class? Have you ever heard anything more childish. For example—

On the screen Ole passed a hand wearily over his face. "I'm sorry. I'm pretty well wrought up, I guess. I've been watching you for days. I guess I know which side you're on, now."

Or how pulpish can one get?

John D. MacDonald, your "Spectator Sport" wasn't funny. I know you can do much better, so I'm not complaining.

That's all, for now.—Hospital Corps School, P&A, U. S. Naval Hospital, Portsmouth, Va.

There seems little to say to this one—Brother Weatherby seems to have said it all—question *and* answer. Thanks all the same, H.S., and write again when opinions come swooping in like those Capistrano swallows. Funny, that place always sounds like a toothpaste to us.

And that is that once again. We'll be seeing you next month in SS and then again with the September issues of TWS and FSQ. That is, of course, if we can still see. Please keep the letters coming, even those booby-trapped with bricks. So long for the nonce.

—THE EDITOR.

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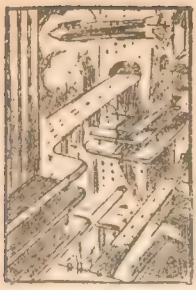

SCIENCE FICTION BOOK REVIEW

PEBBLE IN THE SKY by Isaac Asimov, Doubleday & Co., Inc., New York ($2.50).

Mr. Asimov has conceived a highly arresting premise in his latest published work —namely that of an Earth in the distant future, mother planet of galactic empire, which, partially radioactive and impoverished, has been by-passed by a humanity accustomed to the vaster scale of the stars.

It has become a minor sore-spot in the larger scheme of things, its people ruled by a lesser satrap, and considered the most unreasonable and troublesome of all the hundreds of worlds settled by man. Naturally they are resentful and rebellious.

Euthanasia is automatically enforced at the age of sixty since our planet can no longer support a non-productive older population. And all sorts of interlocking tabus have been set up further to restrict unhappy Earthfolk.

Thanks to a complex experiment being conducted in this far-distant time, Joseph Schwartz, Chicago tailor of today, is pulled into it over the span of ages. He finds himself at first utterly unable to communicate with his fellows and, although already past the sixty-year deadline, is found useful by a poor farming couple, who consider him something of a cretin.

Thus Schwartz becomes a guinea pig for Dr. Shekt, who with his brilliant daughter, Pola, has in hand an experiment to develop the mind of man to its full potential. Such an experiment is directly against the order of the tyrannical Ancients, who govern Earth as Earthlings with all the power of custom made into law. These Ancients are more interested in revenge against the galaxy that has condemned them to their planetary imprisonment.

Into this mess comes Avardan, a brilliant young archeologist from the Galactic capital, highly connected and with some original ideas as to the mother planet. These ideas are as displeasing to the satrap as they are to the Ancients and their aides. For they will disturb the traditions which permit the Ancients to rule and conspire as they will change Galactic theories of human origin.

Shekt's experiment on Joseph Schwartz proves successful and the transplanted Chicagoan, his mind fully released and developed, becomes the one human vessel capable of preventing annihilation of the entire galactic empire. Whether or not he is basically enough man for the job, whether he will survive to do it, become the basic problems to be resolved.

Mr. Asimov has told his story with a quiet approach that permits tension to rise through immutable conflict of character until, in the final chapters, the suspense is almost unbearable. And it is nice, for once, to have Earth the menace instead of the reverse. This is a fine job by a fine stf-master.

FIRST LENSMEN by Edward E. Smith, Ph.D., Fantasy Press, Reading, Pennsylvania ($3.00).

Those who read TRIPLANETARY, in which the galactic struggle of Arisians and Eddorians for control of the universes was narrated in its effect on human history, will have to get this one—as will all other lovers of space opera, pure, unconfined and unrefined.

FIRST LENSMAN begins with the summoning of Virgil Samms, leader of the Space Patrol, to Arisia, the beneficent planet of super-beings, to receive the "lens," a jewel-like device worn on the wrist which is tuned only to its wearer and enables him to maintain billion-parsec telepathic contact with and control of virtually all other forms of life.

Only the finest folk of the various planets make the grade, and they of course include Rocky Kinnison, Samms' right bower, young

Jack Kinnison and others. And in their efforts to form a galactic patrol the lensmen need all the extra powers they can summon, for they are facing an appalling conspiracy for profit, headed by Big Jim Towne and Senator Morgan and backed to the hilt by Eddore.

It is our hunch that, in the resultant clippity-clop dashes and battles around the galaxy, Dr. Smith is in the best form we have yet found him. And he has subordinated his gee-whiz kid stuff and the inevitable accompanying romance to a point where it is, blessedly, hardly obtrusive. A lot better than we dared hope.

THE SCIENCE FICTION GALAXY, edited by Groff Conklin, Permabooks, Garden City, New York (35c).

In this neat little volume Mr. Conklin, science fiction's most famed anthologist, has assembled a dozen stories written between 1912 and 1949 in which various facets of the field are ably handled by able practitioners.

A glimpse of the future is afforded by two of the most famous writers of the first half of the current century in THE MACHINE STOPS by E. M. Forster and EASY AS A. B. C. by Rudyard Kipling, no less. Of these we found the Forster story an amazingly effective and terrifying tale of human degradation by its tools.

William Hope Hobson and Arthur C. Clarke tackle Tellurian wonders with THE DERELICT and THE FIRES WITHIN respectively. The first, a sea-going horror tale, is just that and Mr. Clarke's story is one of concentric worlds within worlds of varying density.

Transdimensional problems are tackled by Murray Leinster in THE LIFE WORK OF PROFESSOR MUNTZ and by Dr. Miles J. Breuer in THE APPENDIX AND THE SPECTACLES. Alien creatures receive attention from A. Rowley Hilliard in DEATH FROM THE STARS and Theodore Sturgeon in the hilarious THE HURKLE IS A HAPPY BEAST. Space travel gets its due from Ray Bradbury in KING OF THE GREY SPACES and Laurence Manning in THE LIVING GALAXY. And the peril of too much science is revealed by John D. MacDonald in A CHILD IS CRYING and Margaret St. Clair in QUIS CUSTODIET.

All of the stories are provocative and well-written and four of them appeared in this magazine or its companion, STARTLING STORIES. It's a worth-while book for any devotee of science fiction.

—THE EDITOR.

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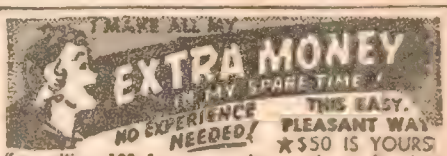

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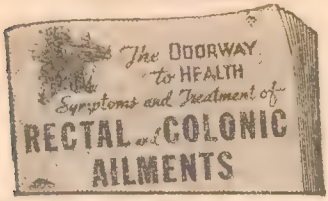

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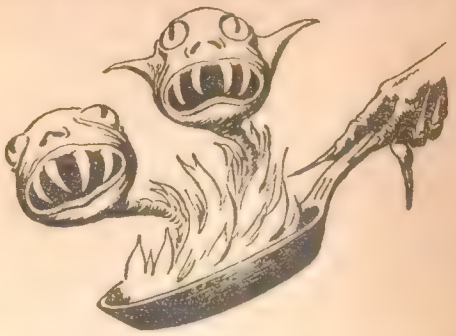

A REVIEW OF FANZINES

DESPITE the number of inee-tipped arrows sent at this column and its author after each appearance, we are definitely for fanzines. If for no other reason we are for them because from their preparation, publication and distribution some of the more zealous of stficionados must discover the hard way some of the problems which afflict prozine editors as well as themselves.

There is nothing on earth more difficult to please than the true fan. If he likes one story, to him another six are terrible and he makes no bones about saying so, even though his reasons are at times amorphous. If he likes all the stories he lands hard on illustrations and/or cover. If both please him he attacks untrimmed edges or the back binding. He is a sort of Toni who likes nothing better than to be in the editor's hair.

Fanzines and Fantasy

He demands the most rigorously limited pseudo science—sneers at fantasy and the adventure story lifted to Mars. But when he fills his own fanzine what does he save? Skipping such vulnerable points as artwork, printing, binding and the like, he usually comes up with a.) the wildest sort of space or time adventure, b.) episodic mood fragments which suggest their author never passed a grammar school English exam or c.) the loosest and most untrammeled type of fantasy or the occult.

By way of example we shall look at the lead story in SCIENTIFANTASY, one of

the all-around better fanzines, in last year's summer issue. It is titled—

The HOUSE
of the
GOD CHULO

It is blurbed—

> "IN THE LAND OF TOHWHATLAN THERE CAME FROM THE FLAMING BELLY OF A METAL BIRD, A WHITE MAN WHOM THE NATIVES CALLED, 'CHULO' . . ."

It begins—

"I am the high priest Tlantoc, high priest of the teocalli Tohwhatlan, the last remaining teocalli to the once-powerful Chulo. Our people have not forgotten him. I have kept him alive throughout the ages. Chulo—once the mightiest god of all Anahuac, mightier than the frog-god Grijanhoah, mightier still than Quetzacoatl. . . ."

And so on. The author, Jon Gordon, goes on to spin his high-priest's story about the man of the future who crashed in ancient Mexico and thus became the "white God"

[*Turn page*]

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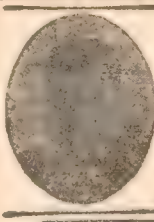

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of which the Aztecs spoke when Cortez landed in the sixteenth century.

In short it is strictly a white-man-and-native adventure yarn with just a dash of time-travel trimming. In shorter, it's one of the yarns which give rise to screams of anguish when a prozine publishes anything like it.

It is this sort of thing that makes us for fanzines. For surely co-editors Bill Kroll and John Grossman of Des Moines, Iowa have learned from this horrid experience that a magazine editor is limited to the best possible selection of the stories *available* at presstime. In short, he is to a great extent utterly dependent upon his authors.

Fans Within Fans

And then, of course, there are fans within fans. As witness this amusing little doggerel from a SPECTATOR AMATEUR PRESS SOCIETY (SAPS) entry, WANIGAS, of unknown lineage, entitled—

PILLAR OF IRE

Curses on you, little man,
Science-fiction neofan,
Taking up my precious time
With your cruddy prose and rhyme,
Sloshed on blurred and blotted pages
—these the end-fruit of the ages!
Oh, Gutenburg! Oh, Shakespeare proud!
You must be whirling in your shroud.
Go, young 'un, leave me my stf;
Come back when you're a BNF.

Which, outside of an unexplained misscansion in the antipenultimate line, seems to us very amusing indeed. Sort of like fleas having fleas—what?

An Exclusive Interview

The Christmas (1949) issue of the Portland Science-Fantasy Society *News Bulletin*, edited by J. M. Higbee at 1219 NE Roselawn, Portland, Oregon, came up with some highly intriguing editorial didoes, commencing with an "EXCLUSIVE INTERVIEW" with author and fan John de Courcy, newly elected chairman of the society. Said Mr. de Courcy—

"After considerable thought I have come to regard my election as a damnable fraud! I cannot condemn too strongly this obvious

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esult of maneuvers in smoke-filled rooms. . . I am opposed to maneuvering in smoke-lled rooms. Limited visibility is the cause f too many accidents and persons working nder these conditions are subject to con-unctivitis and other occupational hazards."

The same page two of the same issue is lso enlivened by a masthead (or rather ottom in this instance) which lists the 'zine s being published merely "semi-". It fails) say semi-what. The managing editor is sted as A. Severus, B. U. M. and the staff s Howie Reeks and Basil Bistro, III.

Also present is the following touching bit—

IN MEMORIAM
Somnutus P. Blenkburdy
Feodor Otis Rutch
A. E. van Vogt
Howie Reeks
Ophielia Mungleprub

Some of the doubtless subtle symbolism capes us but we enjoyed it all the same. aughs are far too sparsely settled in the nworld!

—THE EDITOR.

EXT ISSUE'S HEADLINERS!

AS YOU WERE

A Time-Travel Novelet

By HENRY KUTTNER

THE WEARIEST RIVER

A Novelet of Past and Future

By WALLACE WEST

NEW BODIES FOR OLD

A Fantastic Novelet

By JACK VANCE

US OTHER STORIES AND FEATURES

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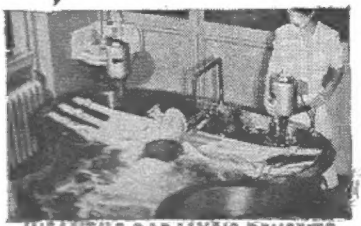
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